



**TECHNICAL MEMORANDUM
JUNE 2001 GROUNDWATER MONITORING REPORT**

**AMERICAN CHEMICAL SERVICE SUPERFUND SITE
GRIFFITH, INDIANA**

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EXECUTIVE SUMMARY

The approved long term groundwater monitoring plan at the American Chemical Service, Inc. (ACS) National Priorities List (NPL) Site in Griffith, Indiana, consists of semi-annual sampling of the 44 wells in the monitoring network. In addition, three of the monitoring wells, MW48, MW49, and MW9R are sampled on a quarterly basis and up to five private wells in the vicinity of the Site are sampled once each year. For one of the semi-annual sampling events, the monitoring well samples are analyzed for the full Target Compound List and Target Analyte List (TCL/TAL) parameters. For the other major sampling event, and the minor sampling events, the samples are analyzed for a reduced list of indicator parameters. Each quarter, water levels are measured at all monitoring network points in a single 24-hour period.

This Technical Memorandum summarizes the June 2001 groundwater monitoring activities at the ACS NPL Site. The June event consisted of a major sampling event, with the samples analyzed for the reduced list of indicator parameters. All samples and analyses were conducted in accordance with the September 1997 United States Environmental Protection Agency (U.S. EPA) approved sampling plan.

In the upper aquifer in the vicinity of the ACS facility, the regional groundwater flow is from east to west. At the ACS Site, the flow is diverted to the north and to the south by the barrier wall, installed as part of the ACS final remedy. The potentiometric surface to the northwest of the Site (including the wetland area) is relatively flat due to the effects of the Perimeter Groundwater Containment System (PGCS) trench, barrier wall, and discharge points from the groundwater treatment plant effluent. Groundwater flow in the lower aquifer is northward with a hydraulic gradient of 0.00047. This gradient is consistent with previous lower aquifer data presented in earlier groundwater technical memoranda.

Vertical gradients were calculated across the upper and lower aquifers and within the lower aquifer. All gradients were consistent with previous findings. Downward vertical gradients were observed between the upper and lower aquifer. Vertical gradients measured in the lower aquifer were small and variable indicating that there is not an overall trend in vertical gradient data in the lower aquifer.

Groundwater sampling within the upper aquifer was conducted at twenty-three monitoring wells during the June 2001 event. Detections of volatile organic compounds (VOCs) and inorganics were compared to the maximum baseline concentrations for each well. Chloroethane exceeded the baseline concentration in the sample from MW19. There were no baseline exceedances of benzene in the upper aquifer wells. Arsenic exceeded baseline concentrations in samples from upper aquifer monitoring wells MW11 and MW38. All other inorganic detections were below baseline values.

Twenty-one lower aquifer wells were sampled during June 2001. Detections of VOCs and inorganics were compared to the maximum baseline concentration for each well. Concentrations of benzene at MW10C and lead at MW33 exceeded baseline

concentrations. All other detections of VOCs and organics were below the baseline concentrations. Since ATMW4D was abandoned and replaced by MW56, benzene and chloroethane have not been detected in samples collected from MW56.

A separate report will be submitted that includes a discussion and data evaluation for the groundwater treatment system effluent samples.

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ACRONYMS AND ABBREVIATIONS

µg/L	Micrograms per Liter
1,2-DCE	1,2-Dichloroethene
ACS	American Chemical Services
BWES	Barrier Wall Extraction System
DCE	1,1-Dichloroethene
DO	Dissolved oxygen
NPL	National Priorities List
ORP	Oxidation-Reduction Potential
PCBs	Poly-Chlorinated Biphenyls
PCE	Tetrachloroethene
PGCS	Perimeter Groundwater Containment System
QAPP	Quality Assurance Program Plan
SOPS	Specific Operating Procedures
SVOCs	Semivolatile Organic Compounds
TCA	1,1,1-Trichloroethene
TCE	Trichloroethene
TCL/TAL	Target Compound List/Target Analyte List
TICs	Tentatively Identified Compounds
U.S. EPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

1.1 LONG TERM GROUNDWATER MONITORING PLAN

The long-term groundwater monitoring plan, approved by United States Environmental Protection Agency (U.S. EPA) in September 1997, for the American Chemical Service, Inc. (ACS) National Priorities List (NPL) Site in Griffith, Indiana, consists of two major (semi-annual) sampling events each year and two minor sampling events. The major sampling events consist of sample collection at 44 monitoring wells in the monitoring network. For one of the semi-annual sampling events, the groundwater samples are analyzed for full scan Target Compound List and Target Analyte List (TCL/TAL) parameters. For the other semi-annual sampling event, the samples are analyzed for a reduced list of indicator parameters. The indicator parameters are tetrachloroethene (PCE), trichloroethene (TCE), 1,1,1-trichloroethane (TCA), 1,1-dichloroethene (DCE), 1,2-dichloroethene (1,2-DCE), vinyl chloride (VC), chloroethane, benzene, arsenic, and lead.

The minor sampling events consist of sampling three monitoring wells within the monitoring network, which have shown variable contaminant concentrations during the baseline sampling. These include upper aquifer monitoring wells MW48 and MW49, and lower aquifer monitoring well MW9R. Samples from these monitoring wells are analyzed for indicator parameters.

During each of the four annual sampling events, water levels are collected from the full monitoring network prior to collecting groundwater samples. These measurements are conducted within a 24-hour period and used to construct hydraulic gradient maps and tables.

Once annually, samples are collected from up to five private wells and analyzed for the full scan TCL/TAL parameters. This private well sampling has generally been conducted concurrently with the third-quarter groundwater monitoring event.

1.2 OBJECTIVES AND SCOPE OF JUNE 2001 SAMPLING

The June 2001 sampling event was a major sampling event, with sample collection at 44 monitoring wells. All 44 samples were analyzed for the reduced list of indicator parameters. The following objectives from the long-term groundwater monitoring plan apply to the quarterly sampling at the ACS NPL Site.

1. Collect water level data to monitor groundwater flow in the upper and lower aquifers and calculate the hydraulic gradients between the aquifers.
2. Collect water level data to document the performance of the Perimeter Groundwater Containment System (PGCS) and Barrier Wall Extraction System (BWES) and to

evaluate changes in the groundwater flow system resulting from the remedial actions (these activities are outlined in the Performance Standard Verification Plan, April 1997). The Groundwater Treatment Plant Quarterly Monitoring Report is submitted under separate cover and includes information on this objective.

3. Collect and analyze groundwater samples from upgradient monitoring wells in the upper and lower aquifer to document background groundwater quality.
4. Collect and analyze groundwater samples from the monitoring wells at the downgradient boundaries of the Site to closely monitor the status of the boundaries of groundwater impacts.
5. Collect and analyze groundwater samples from the interior of the areas of contaminated groundwater to document how concentrations change with time and in response to the remedial actions.
6. Assess progress toward attaining cleanup objectives in contaminated areas.

1.3 ORGANIZATION OF TECHNICAL MEMORANDUM

The results of the June 2001 groundwater monitoring activities at the ACS NPL Site are presented in the following sections of this report:

- Section 1 Objectives and scope of the groundwater monitoring activities
- Section 2 Field data collection activities
- Section 3 Evaluation of the June 2001 sampling data
- Section 4 Summary and Conclusions

Tables, figures and appendices are presented at the end of this report.

A baseline sampling report was completed following the September 1997 sampling event and included a long-term Groundwater Monitoring Plan. In accordance with the U.S. EPA-approved Groundwater Monitoring Plan, this Technical Memorandum compares the June 2001 groundwater analytical results to the highest detected concentrations observed for each well and parameter during the baseline sampling. This comparison table is found in Appendix A.

2.0 FIELD DATA COLLECTION ACTIVITIES JUNE 2001

Field activities were conducted from June 18 through 22, 2001 at the ACS Site. The groundwater monitoring activities were conducted in accordance with the U.S. EPA-approved Specific Operating Procedures (SOPs), the Pre-Design Quality Assurance Project Plan (QAPP) submitted in August 1995, and U.S. EPA comments regarding the Pre-Design QAPP. All monitoring wells were purged and sampled using low-flow methods in accordance with the approved Monitoring Well Sampling Proposal and Protocol SOP for the Upper Aquifer Investigation (Revision: July 25, 1996). The June 2001 groundwater sampling event consisted of the following activities:

- Measurement of water levels in 131 upper and lower aquifer wells, piezometers, and staff gauges on June 18, 2001.
- Collection of groundwater samples from 23 upper aquifer monitoring wells and analyses for indicator parameters.
- Collection of groundwater samples from 21 lower aquifer monitoring wells and analysis for indicator parameters.

2.1 WATER LEVELS

Water level measurements were collected at the majority of upper and lower aquifer wells, piezometers, and surface water staff gauges on June 18, 2001. The water level measurements were utilized to determine horizontal gradients in the upper and lower aquifers, and to calculate vertical gradients between the aquifers and within the lower aquifer. Table 1 contains water level measurements, map coordinates (reference points), top of inside well casing elevations, and calculated groundwater elevations for the measurement points.

2.2 GROUNDWATER SAMPLING

Prior to sampling the monitoring wells, each well was purged using low-flow methods in accordance with the U.S. EPA approved Monitoring Well Sampling SOP of the Upper Aquifer Investigation (revision: March 21, 1997). Field parameters (pH, specific conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity) were measured and recorded during well purging activities. Table 2 presents a summary of the field parameter results.

The groundwater samples were sent overnight under chain-of-custody to CompuChem Laboratory, Cary, North Carolina, where they were analyzed for the parameters

summarized in Tables 3 and 4. The tables summarize well identification, well screen depth (lower aquifer only), well location, and monitoring parameters.

Many of the DO values during the June 2001 sampling event were recorded as zero (Table 2). These zero DO readings are all associated with the same field crew. These readings seem likely due to a faulty DO sensor, since the meter was calibrated correctly and all of the other parameters recorded by this meter were within normal ranges. The field crew thought that zero readings for DO were normal, and did not report it to the task manager until after the sampling event was completed. This error should not have any affect on the analytical results.

3.0 EVALUATION OF JUNE 2001 SAMPLING DATA

3.1 GROUNDWATER FLOW SYSTEM DATA

The groundwater elevations listed in Table 1 were used to develop water table and potentiometric surface maps for the upper and lower aquifers. Additionally, the horizontal hydraulic gradient was calculated for the lower aquifer and vertical hydraulic gradients were calculated within the lower aquifer and between the upper and lower aquifers. The following sections present and discuss the general flow directions in the upper and lower aquifers and the calculated gradients.

3.1.1 Groundwater Flow in the Upper Aquifer

The upper aquifer matrix is homogeneous silty sand with no evidence of interlayering or bedding complexities. Many years of groundwater flow monitoring have shown that the natural regional groundwater flow in this aquifer is westward. The barrier wall, completed in 1997, diverts the groundwater flow to the north-northwest and to the south-southeast.

Figure 1 presents the upper aquifer water table elevations from data collected on June 18, 2001. Due to the large number of data points (5 staff gauges, 24 wells, and 79 piezometers), little interpolation was required to develop detailed contour plots. Since the Remedial Investigation in 1991, all water table maps developed for the ACS Site have consistently shown the same general groundwater flow patterns. The gradient to the northwest of the site is relatively flat due to the affects of the PGCS trench, barrier wall, and discharge points from the groundwater treatment plant. These discharge points are located near MW46 in the wetlands, and are labeled 1, 2, and 3 as shown in Figure 1. South of the Site, the groundwater flows around the Site to the west, and to the southeast.

3.1.2 Groundwater Flow in the Lower Aquifer

The lower aquifer groundwater elevations listed in Table 1 were used to develop a potentiometric surface map for the lower aquifer (Figure 2). The groundwater flow in the lower aquifer is northward, consistent with historical groundwater data. The horizontal hydraulic gradient in the lower aquifer was calculated using the measured difference in head between MW50, located south of the Site, and MW52, located northwest of the Site in the wetlands. This difference, 1.15 feet on June 18, 2001, was divided by the lateral distance between the two wells (2,429 feet), yielding a horizontal hydraulic gradient in the lower aquifer of 0.00047. This is consistent with the relatively low gradients historically calculated for the lower aquifer, as summarized below.

Report of Hydraulic Gradient in Lower Aquifer	Horizontal Hydraulic Gradient
Technical Memorandum (October 1995)	0.00041
Lower Aquifer Tech Memo (September 1996)	0.00047
Groundwater Monitoring Report (August 1996)	0.00047
Groundwater Monitoring Report (November 1996)	0.00049
Groundwater Monitoring Report (March 1997)	0.00040
Groundwater Monitoring Report (June 1997)	0.00044

Report of Hydraulic Gradient in Lower Aquifer		Horizontal Hydraulic Gradient
Groundwater Monitoring Report	(September 1997)	0.00035
Groundwater Monitoring Report	(December 1997)	0.00039
Groundwater Monitoring Report	(June 1998)	0.00042
Groundwater Monitoring Report	(September 1998)	0.00029
Groundwater Monitoring Report	(December 1998)	0.00024
Groundwater Monitoring Report	(March 1999)	0.00033
Groundwater Monitoring Report	(June 1999)	0.00038
Groundwater Monitoring Report	(September 1999)	0.00035
Groundwater Monitoring Report	(November 1999)	0.00030
Groundwater Monitoring Report	(March 2000)	0.00039
Groundwater Monitoring Report	(June 2000)	0.00041
Groundwater Monitoring Report	(September 2000)	0.00041
Groundwater Monitoring Report	(November 2000)	0.00049
Groundwater Monitoring Report	(March 2001)	0.00047
June 2001 Groundwater Monitoring Report		0.00047
Average		0.00040

3.1.3 Vertical Gradients in the Lower Aquifer

Seven nested well sets are screened in the lower aquifer. At each location, there are two or three monitoring wells and/or piezometers, each screened at a different depth within the lower aquifer. The depth intervals include the upper portion, the middle portion, and the lower portion. The water level elevations (Table 1) were used to calculate vertical hydraulic gradients in the lower aquifer at each location. Table 5 summarizes the calculated vertical gradients from June 2001, which are shown in their historical context in the following tabulation:

Well/Piezometer Nest	June 1999	Sept 1999	Nov 1999	Mar 2000	June 2000	Sept 2000	Nov 2000	March 2001	June 2001
MW7/PZ44	WU	-0.0016	0.0064	-0.0016	-0.1208	WU	-0.0024	WU	-0.0064
MW8/MW32	-0.0007	0.0227	WU	0.0017	-0.0009	0.0013	-0.0007	0.0216	0.0011
MW9R/MW34	0.0037	0.0040	0.0037	0.0040	0.0035	0.0035	0.0035	0.0021	0.0033
MW30/MW33	-0.0058	WU	-0.0005	WU	-0.0063	-0.0016	0.0021	-0.0011	-0.0016
MW28/PZ43	0.0025	0.0140	0.0029	-0.0012	-0.0025	WU	0.0021	WU	WU
MW52/MW53	-0.0008	-0.0002	-0.0008	-0.0010	-0.0010	-0.0004	-0.0006	-0.0008	-0.0012
MW54R/MW55	-0.0077	-0.0071	-0.0020	-0.0055	-0.0061	-0.0081	-0.0065	-0.0073	-0.0067

Notes:

WU= Within uncertainty of measurement technique.

NA = A water elevation necessary for the calculation was not available.

Negative value indicates downward gradient.

Of the calculated vertical gradients across the lower aquifer, four were downward, two were upward, and one was within the uncertainty of the measurement technique. Consistent downward vertical gradients are observed at well nests MW52/MW53 and MW54R/MW55, and consistent upward vertical gradients are observed at well nest MW9R/MW34. This variability indicates that there is not an overall trend in vertical gradient data in the lower aquifer.

3.1.4 Vertical Gradient Between Upper and Lower Aquifer

Water level elevations from upper and lower aquifer monitoring points in close proximity were utilized to calculate the vertical hydraulic gradient between the two aquifers at three locations (P28/MW8, P27/MW9R, and P8/MW7). Vertical gradients were calculated by dividing the difference in head between the upper and lower aquifer wells by the thickness of the clay-confining layer between the two wells. These calculations are summarized in Table 6, and show that there is a relatively strong downward gradient from the upper aquifer to the lower aquifer. The gradients at these locations are consistent with previous findings.

3.2 MONITORING WELL SAMPLE DATA

Groundwater samples were analyzed for indicator parameters (PCE, TCE, TCA, DCE, 1,2-DCE, VC, chloroethane, benzene, arsenic, and lead). The laboratory results were validated in accordance with U.S. EPA Region V guidelines, *U.S. EPA Contract Laboratory Program National Functional Guidelines For Organic Data Review (1994)* and *Inorganic Data Review (1994)*. The validated analytical results for the June 2001 quarterly sampling event were then evaluated for evidence of contaminant migration, changes in contaminant concentrations over time in response to remedial actions, and the presence of contaminants in the lower aquifer.

The analytical results are summarized in tabular form in Appendix A. Time trend plots for consistently affected monitoring wells are presented in Appendix B. Validation narratives and laboratory analytical reports for samples from the upper aquifer and the lower aquifer are provided in Appendices C and D, respectively. The following sections summarize the results of the organic analyses in the upper aquifer (Section 3.2.1), the organic analyses in the lower aquifer (Section 3.2.2), and the inorganic analyses in both aquifers (Section 3.2.3).

3.2.1 Groundwater Sampling Results in the Upper Aquifer

The Site source areas are currently contained within the barrier wall, which prevents future migration of contaminants to adjacent areas. Because of this, the groundwater monitoring program is focused on the adjacent areas not confined by the barrier wall. The monitored areas are: the areas north and west of the ACS Facility, referred to as the North Area; the area south/southeast of Colfax Avenue, referred to as the South Area; and the Town of Griffith Landfill, which covers the area to the southwest of the ACS Site.

Table 7 presents a summary of indicator organic compounds detected in groundwater samples collected from upper aquifer wells in these areas during the June 2001 sampling event.

3.2.1.1 VOCs

The impact to groundwater in the three surrounding areas is comprised primarily of chloroethane and benzene. The only other VOCs detected during June 2001 were PCE and trans-1,2-dichloroethene (tDCE), and these compounds were detected at estimated concentrations below the reporting limit. Figure 3 shows the location of VOC detections in upper aquifer wells on a map of the ACS Site. Below is a discussion of the VOC analytical results for each of the three surrounding areas.

North Area. The North Area is monitored by an array of groundwater monitoring wells located hydraulically upgradient of the North Area, within the North Area, at the edge (side gradient) of the North Area, and hydraulically downgradient from the edge of the North Area. These wells are as follows:

Upgradient (east/northeast of Site)	Interior (north of Site)	Side Gradient (north of Site)	Downgradient (north of Site)
MW11	MW13	MW39	MW37
MW12	MW48		MW38
MW40	MW49		

No VOCs were detected in groundwater samples from the upgradient wells. Benzene and tDCE were detected at side-gradient well MW39, however, the estimated concentrations of these compounds (1 and 3 µg/L, respectively) were below the baseline concentrations for these compounds. No VOCs were detected in groundwater samples from downgradient wells MW37 and MW38.

Chloroethane and benzene were detected in interior wells MW48 and MW49, but did not exceed maximum baseline concentrations during the June 2001 sampling event. Concentrations of benzene and chloroethane in these wells continue to show decreasing trends. Time trend plots for these compounds are found in Appendix B. The compound tDCE was detected at estimated concentrations (1 µg/L) in MW49. The following table summarizes historical benzene and chloroethane detections in MW48 and MW49:

Monitoring Wells MW48 and MW49 (Upper Aquifer)

Monitoring Well	MW48		MW49	
	Benzene	Chloroethane	Benzene	Chloroethane
Baseline Value	9,500	1,000	6,750	715
August 1996	9,100	1,000	5,000	480
March 1997	5,200	620	1,600	310
June 1997	7,700	670	4,800	540
September 1997	9,500	980	8,200	810
December 1997	3,800	300	3,300	250
June 1998	9,500	720	4,500	450
September 1998	7,800	610	4,700	650
December 1998	5,500	420	4,200	440

Monitoring Well	MW48		MW49	
Sampling Date	Benzene	Chloroethane	Benzene	Chloroethane
<i>Baseline Value</i>	9,500	1,000	6,750	715
March 1999	1,900	83	1,900	180
June 1999	5,700	290	2,600	220
September 1999	5,400	290	2,200	210
November 1999	2,400	140	2,400	260
March 2000	220	24	530	91
June 2000	3,800	160	ND	ND
September 2000	4,100	100	630	220
November 2000	1,100	78	610	190
March 2001	2,000	78	900	120
June 2001	2,800	80	630	91

Note:

All concentrations in micrograms per liter ($\mu\text{g}/\text{L}$)

ND indicates compound was not detected

Chloroethane and benzene were not detected in interior well MW13 during the June 2001 sampling round. Concentrations of chloroethane and benzene have not been detected at MW13 since the barrier wall and perimeter groundwater containment system were completed. The following table summarizes historical chloroethane and benzene detections in MW13:

Monitoring Well MW13 (Upper Aquifer)

Sampling Date	Benzene	Chloroethane
<i>Baseline Value</i>	610	570
November 1996	6	97
March 1997	170	330
June 1997	610	570
September 1997	33	160
December 1997	ND	20
June 1998	2.0 J	82 J
December 1998	ND	ND
June 1999	ND	ND
November 1999	ND	ND
March 2000	ND	ND
September 2000	ND	ND
June 2001	ND	ND

Notes:

All concentrations in micrograms per liter ($\mu\text{g}/\text{L}$)

J qualifier indicates concentration is estimated.

ND indicates compound was not detected

South Area. The South Area is monitored by an array of groundwater wells located hydraulically upgradient of the South Area, within the South Area, at the edge (side gradient) of the South Area, and hydraulically downgradient from the edge of the South Area. These wells are as follows:

Upgradient (south/east of Site)	Interior (south/southeast of Site)	Side Gradient (south/southeast of Site)	Downgradient (southeast of Site)
MW17	MW6 MW45 MW19	MW41 MW44 MW47	MW15 MW42 MW43

Chloroethane and benzene were not detected in samples from side-gradient or downgradient wells, except for MW15, in which benzene was detected at an estimated concentration (1 µg/L) below the maximum baseline concentration.

Upgradient well MW18 was not accessible, and recently has not contained enough water to collect an adequate sample. In its place, monitoring well MW17 was sampled as an upgradient well. It is located approximately 150 feet closer to the ACS Site than MW18. Benzene and chloroethane were not detected in the sample from MW17, however PCE was detected at an estimated concentration of 6 µg/L, which is below the maximum baseline concentration of 10 µg/L for this well.

Chloroethane and benzene were detected in samples from interior wells MW06, MW19, and MW45. The concentration of chloroethane in the sample from MW19 (28 µg/L) exceeded its baseline concentration (20 µg/L). All other results from interior wells were below the baseline concentrations. Previously, the chloroethane concentration at MW45 increased from 38 µg/L in March 2000 to 820 µg/L in September 2000; however, in June 2001, chloroethane concentrations were 17 µg/L. Overall, concentrations of benzene and chloroethane in samples from MW45 have decreased significantly over the past few years. Below are summaries of benzene and chloroethane concentrations at wells MW06 and MW45.

Monitoring Well MW06 (Upper Aquifer)

Sampling Date	Benzene	Chloroethane
<i>Baseline Value</i>	320	720
November 1996	320	720
March 1997	35	67
June 1997	39	140
September 1997	140	140
December 1997	1,900	550 J
June 1998	72 J	350 J
December 1998	930	840
June 1999	180	78
November 1999	480	310
March 2000	2,100	420
September 2000	130	22
March 2001	2,000	270
June 2001	26	18

Notes:

All concentrations in micrograms per liter (µg/L)

J qualifier indicates concentration is estimated.

Monitoring Well MW45 (Upper Aquifer)

Sampling Date	Benzene	Chloroethane
Baseline Value	1045	215
August 1996	530	82 J
March 1997	1,045	215
June 1997	940	120
September 1997	860	120
December 1997	670	130 J
June 1998	670 J	120 J
December 1998	500	88
June 1999	360	38
November 1999	340	32
March 2000	290	38
September 2000	43	820
June 2001	39	17

Notes:

All concentrations in micrograms per liter ($\mu\text{g/L}$)

J qualifier indicates concentration is estimated.

Griffith Landfill. The Griffith Landfill covers the area to the southwest of the Off-Site Containment Area of the Site. Two city owned monitoring wells in the upper aquifer, M-1S and M-4S, were sampled in the Griffith Landfill.

Chloroethane and benzene were detected in the sample collected at M-4S. These concentrations were below the baseline concentrations for well M-4S. The concentration of chloroethane in samples from M-4S has fluctuated over the last several years. Since well M-4S is located on the Landfill property, the groundwater quality at this location likely represents landfill leachate. Benzene was detected in the sample from well M-1S at 4 $\mu\text{g/L}$, which is an estimated concentration below the baseline concentration.

3.2.1.2 SVOCs

Semivolatile organic compounds (SVOCs) were not analyzed as part of the June 2001 groundwater monitoring activities within the upper aquifer in accordance with the approved Groundwater Monitoring Plan.

3.2.1.3 Pesticides and PCBs

Pesticides and PCBs were not analyzed as part of the June 2001 groundwater monitoring activities within the upper aquifer in accordance with the approved Groundwater Monitoring Plan.

3.2.1.4 Tentatively Identified Compounds (TICs)

Several VOC tentatively identified compounds (TICS) were detected in upper aquifer monitoring wells during June 2001. Ether was detected in the following five upper aquifer

monitoring wells: MW06 (11 µg/L), M-1S (25 µg/L), MW13 (8 µg/L), MW19 (19 µg/L), and M-4S (8 µg/L). Other VOC TICs detected during June 2001 include 1,4-dioxane, cyclohexane, various benzene-related compounds, and unknown compounds. These results are consistent with previous results at these locations. The complete listing of TICs is compiled in Appendix C with the analytical results.

3.2.2 Groundwater Sampling Results from the Lower Aquifer

Table 8 presents a summary of indicator organic compounds detected in groundwater samples collected from lower aquifer monitoring wells during the June 2001 sampling event.

3.2.2.1 VOCs

Benzene and chloroethane were the only VOCs detected in lower aquifer wells during the June 2001 sampling event. Figure 4 shows the locations of VOC detections in lower aquifer wells on a map of the ACS Site. Below is a discussion of these detections:

The June 2001 benzene concentrations at MW09R have decreased slightly since the March 2001 sampling event, while chloroethane concentrations have increased slightly. Both benzene and chloroethane concentrations were below baseline values. The following tabulation shows how the concentration of benzene has decreased since the original MW09 was replaced with MW09R:

Monitoring Well MW09/MW09R

Sampling Date	Benzene	Chloroethane
<i>Baseline Value</i>	310	2900
March 1997	310	2900
June 1997	280	1700
September 1997	290	1800
December 1997	260	2000
June 1998	110	1400
September 1998	100	2000
December 1998	160	2300
March 1999	130	760
June 1999	160	490
September 1999	120	650
November 1999	160	540
March 2000	120	460
June 2000	60	660
September 2000	65	970
March 2001	42	360
June 2001	19	450

Notes:

Gray line indicates abandonment of MW09 and installation of replacement well MW09R

All concentrations in micrograms per liter (µg/L)

The benzene concentration in the sample from MW10C exceeded the maximum baseline concentration in the June 2001 sampling event. Concentrations of benzene and chloroethane have fluctuated over the last several years, and this well will continue to be monitored in future sampling events. The following tabulation shows the historical concentrations of benzene and chloroethane at MW10C.

Monitoring Well MW10C

Sampling Date	Benzene	Chloroethane
<i>Baseline Value</i>	150	420
May 1990	ND	ND
January 1995	ND	ND
November 1996	ND	120
March 1997	ND	140
June 1997	ND	440
September 1997	ND	420
December 1997	ND	160
June 1998	ND	160
December 1998	66	150
June 1999	2,000	2,600
September 1999	83	88
November 1999	340	360
March 2000	120	180
June 2000	150	160
September 2000	520	630
November 2000	1800	140
March 2001	410	190
June 2001	450	240

Notes:

ND = Not detected

All concentrations in micrograms per liter ($\mu\text{g/L}$)

Monitoring Well ATMW4D/MW56

Sudden increases in concentration of benzene were noted in samples from ATMW4D, a well that was installed by ACS Inc. before the Remedial Investigation. It was suspected that the sudden appearance of contaminants was evidence that the well itself was causing cross-contamination between the upper and lower aquifers. Upon U.S. EPA approval, monitoring well ATMW4D was abandoned and replaced with well MW56 in April 2001. MW56 was installed immediately downgradient of ATMW4D to represent lower aquifer groundwater characteristics at this location. Since installation, this well has been sampled two times and neither benzene nor chloroethane have been detected in any of the samples. The following tabulation shows the sampling results for monitoring well ATMW4D and MW56:

Sampling Date	Benzene	Chloroethane
December 1998	ND	ND
June 1999	ND	ND
November 1999	3	9
March 2000	12	34
September 2000	1,200	88
November 2000	3,500	120
March 2001	1,800	42
April 2001	ND	ND
June 2001	ND	ND

Notes:

Gray line indicates abandonment of ATMW4D and installation of replacement well MW56

All concentrations in micrograms per liter ($\mu\text{g/L}$)

ND = Not detected

3.2.2.2 SVOCs

Semivolatile organic compounds (SVOCs) were not analyzed as part of the June 2001 groundwater monitoring activities within the lower aquifer in accordance with the approved Groundwater Monitoring Plan.

3.2.2.3 Pesticides and PCBs

Pesticides and PCBs were not analyzed as part of the June 2001 groundwater monitoring activities within the lower aquifer in accordance with the approved Groundwater Monitoring Plan.

3.2.2.4 Tentatively Identified Compounds (TICs)

Several VOC TICs were detected in the lower aquifer monitoring wells sampled during June 2001. Ether was detected in the following two lower aquifer wells: MW10C (4,500 $\mu\text{g/L}$) and MW30 (13 $\mu\text{g/L}$). Other VOC TICs detected during June 2001 include 1,4-dioxane and several unknowns. The detections are consistent with previous TIC sampling results. The complete listing of TICs is compiled in Appendix D with the analytical results.

3.2.3 Inorganic Chemical Species

The June 2001 inorganic results are compiled in Appendix A along with the maximum baseline concentrations. Table 9 summarizes the baseline exceedances of the inorganic analyses during the June 2001 sampling event.

3.2.3.1 Upper Aquifer

Concentrations of arsenic in groundwater samples from upper aquifer monitoring wells MW11 and MW38 exceeded baseline concentrations during June 2001. During previous sampling events, arsenic concentrations in samples from these wells have been either non-detect or below maximum baseline concentrations. These exceedances are considered naturally occurring and non-threatening to human health and the environment. There were no exceedances of lead in the upper aquifer wells.

3.2.3.2 Lower Aquifer

The concentration of lead in the groundwater sample from lower aquifer monitoring well MW33 exceeded its baseline concentration during June 2001. During previous sampling events lead has not been detected in samples from this well. There were no exceedances of arsenic and lead concentrations in groundwater samples from other lower aquifer monitoring wells during June 2001.

4.0 CONCLUSIONS

The following conclusions can be drawn for each objective of the Groundwater Monitoring Plan.

Objective 1 was to collect water level data to monitor groundwater flow in the upper and lower aquifers and calculate the hydraulic gradients between the aquifers. The data collected indicates that groundwater flow directions and groundwater gradients for the June 2001 sampling event are consistent with past conditions for both the upper and lower aquifers.

Objective 2 was to collect water level data to document the performance of the PGCS and BWES and to evaluate changes in the groundwater flow system resulting from the remedial actions. The data indicate the barrier wall is containing the groundwater enclosed within the wall. In general, groundwater flow from the east is diverted toward the north/northwest and south/southwest. The groundwater diverted north/northwest is either collected in the PGCS extraction trench or continues to the wetlands. Groundwater diverted south/southwest flows along the barrier wall towards the southwest. These observations are consistent with previous observations.

Objective 3 was to collect and analyze groundwater samples from upgradient monitoring wells in the upper and lower aquifers to document background groundwater quality. In the upper aquifer, there were no detections of VOCs in samples from upgradient wells MW11, MW12, and MW40. PCE was detected in the sample from MW17 at a low, estimated concentration, but no other VOCs were detected at this well. Sample results from upgradient lower aquifer wells MW28 and MW50 did not have any detections of VOCs. Arsenic concentrations at MW11 exceeded the baseline concentration for this well, however, it is likely that this detection represents natural background conditions of random variability rather than an indication of decreasing groundwater quality. The data indicates that upgradient groundwater is free of VOC contamination.

Objective 4 was to collect and analyze groundwater samples from downgradient monitoring wells to closely monitor the status of the boundaries of groundwater impacts. In the upper aquifer, trace amounts of VOCs were detected in samples from wells MW15 and MW39. The concentration of arsenic in MW38 exceeded the baseline concentration; however, this compound has not been detected at this well in recent sampling events. In the lower aquifer, trace amounts of VOCs were detected in well MW53. The lead concentration in MW33 slightly exceeded the baseline concentration. Lead has not been detected in samples from this well in previous sampling events. There were no other detections of VOCs or inorganics in any other downgradient wells in the upper or lower aquifer. Despite the trace detections of VOCs, the data indicates that the boundaries of impacted groundwater are not expanding and the plume appears stable.

Objective 5 was to collect and analyze groundwater samples from the interior of the areas of contaminated groundwater to document how concentrations change with time and in

response to the remedial actions. In the upper aquifer, the concentration of chloroethane in the sample from MW19 decreased from the previous sampling event; however still exceeding the baseline concentration value. Concentrations of benzene and chloroethane at North Area interior wells MW48 and MW49 and at South Area interior wells MW06 and MW45 were below the baseline concentrations and have decreased over the past several sampling events. In the lower aquifer, concentrations of benzene and chloroethane at MW09R were below baseline values, and although they have fluctuated over the past few sampling events, the concentrations have shown generally decreasing trends. The historical VOC concentrations at MW10C show occasional spikes in concentration. While the results for this sampling event exceed the baseline concentration, they are still within the normal range of expected concentrations. At well MW10C, concentrations of benzene and chloroethane were similar to previous events, while the benzene concentration exceeded the baseline concentration. Response action to the baseline exceedances at MW10C and MW19 will be to continue monitoring.

Objective 6 was to assess progress toward attaining cleanup objectives in the contaminated areas. In the upper aquifer, concentrations of benzene and chloroethane in MW48 and MW49 have decreased over the past several years of monitoring, and may be related to ORC application and the fact that the barrier wall contains the original source material. Concentrations of benzene and chloroethane at MW13 have been below detection limits since December 1998; this decrease is likely due to the effects of the Perimeter Groundwater Containment System. Concentrations at well MW45 have also decreased.

In the lower aquifer, concentrations of benzene and chloroethane at MW09R have decreased over the last several sampling events, while concentrations at MW10C have shown slightly variable results. VOCs have not been detected in samples from monitoring well MW56, which replaced ATMW4D in April 2001.

In summary, the groundwater elevation data indicate that no significant changes have occurred in the groundwater flow directions at the ACS Site. The groundwater monitoring data demonstrate that the BWES is working to contain contaminants inside the barrier wall, that contamination outside of the barrier wall has not migrated beyond its historical extent, and that concentrations in contaminated areas outside of the barrier wall have decreased in several areas. While some sample results show variability, most are below baseline values or show decreasing concentration trends. Sample results from the North Area show that the concentrations are decreasing in the upper aquifer.

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Table 1
Groundwater Level Gauging Points - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Upper Aquifer Wells

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOIC	level	Elevation	
MW6	5298	5520	655.28	22.65	632.63	
MW11	6377	7329	640.47	6.72	633.75	
MW12	6019	6352	642.74	8.79	633.95	
MW13	5050	7814	634.08	3.95	630.13	
MW14	4882	6995	638.56	9.09	629.47	
MW15	4721	5003	637.89	5.69	632.20	
MW17	5656	5677	647.10	14.08	633.02	
MW18	5836	5746	644.89	NM	NM	could not access due to car parked over well
MW19	5231	4943	635.78	3.78	632.00	
MW37	5395	7976	636.78	5.56	631.22	
MW38	5903	8216	636.51	5.55	630.96	
MW39	6253	7947	637.77	5.68	632.09	
MW40	6349	6831	639.46	5.55	633.91	
MW41	6242	4517	632.74	5.99	626.75	
MW42	6264	3808	632.32	5.31	627.01	
MW43	5880	3719	633.56	6.15	627.41	
MW44	5390	4303	633.04	4.00	629.04	
MW45	5830	4388	635.35	6.65	628.70	
MW46	4526	7424	633.32	2.87	630.45	
MW47	5958	5084	640.54	6.97	633.57	
MW48	5669	7814	636.36	5.03	631.33	
MW49	5551	7650	637.00	5.65	631.35	
M1S	4362	5743	639.09	6.08	633.01	Griffith Landfill Well
M4S	4953	6537	633.42	2.77	630.65	Griffith Landfill Well

Staff Gauges

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOSG	level	Elevation	
SG2	4423	6864	622.84	NM	NM	Does Not Exist - Covered by landfill
SG7	5403	6889	637.01	NM	NM	destroyed
SG8R	5409	5252	634.70	2.19	632.51	
SG1	5023	6196	633.50	NM	NM	Does Not Exist
SG3	4180	7123	631.17	1.8	629.4	Estimate, gauge too far out in water
SG5	5464	7713	633.36	3.5	629.9	Estimate
SG6	4495	8075	632.97	2.5	630.5	Estimate
SG11	5859	8245	634.62	NM	NM	Dry
SG12	5596	7867	634.12	3.4	630.7	Dry next to SG, went out 3" to get reading

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOIC = top of inner casing

TOSG = top of staff gauge

NM = not measured (reason given under "Notes" column)

Table 1
Groundwater Level Gauging Points - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Lower Aquifer Wells and Piezometers

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOIC	Level	Elevation	
MW28	5657	5696	648.77	26.00	622.77	
PZ42	5662	5696	648.44	25.77	622.67	
PZ43	5662	5702	648.69	25.94	622.75	
MW50	5269	5383	649.43	26.69	622.74	
PZ44	6170	6766	638.47	16.36	622.11	
MW7	6113	6732	641.46	19.27	622.19	
MW10C	5229	7554	637.45	15.55	621.90	
MW9R	4893	6990	639.05	17.11	621.94	
MW29	4886	7012	638.06	15.97	622.09	
MW34	4880	7002	638.14	16.04	622.10	
MW23	4717	7404	633.31	11.54	621.77	
MW24	4596	8033	635.22	13.87	621.35	
MW52	4996	7814	632.74	11.15	621.59	
MW53	4977	7833	632.87	11.34	621.53	
MW51	5198	7767	634.16	12.62	621.54	
MW30	5194	7774	634.25	12.75	621.50	
MW33	5189	7774	634.13	12.66	621.47	
MW54R	5590	7592	637.51	15.71	621.80	
MW55	5595	7604	636.63	15.17	621.46	
MW8	5934	7506	640.43	18.75	621.68	
MW31	5907	7505	641.64	19.96	621.68	
MW32	5902	7507	641.84	20.11	621.73	
M4D	4949	6538	633.32	11.25	622.07	Griffith Landfill Well

Piezometers

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOC	level	Elevation	
LW1	4807	5070	644.57	12.19	632.38	
LW2	4662	5465	649.70	17.11	632.59	
P3	5453	6470	639.87	NM	NM	Destroyed
P5	5285	6510	636.70	9.71	626.99	
P7	5950	6630	643.63	9.61	634.02	
P8	6156	6734	639.27	5.38	633.89	
P9	6134	6994	638.88	5.00	633.88	
P10	5413	5852	649.32	NM	NM	Destroyed
P11	5199	5900	649.14	NM	NM	Destroyed
P13	4878	5735	651.20	18.44	632.76	
P15	5003	6187	639.93	7.77	632.16	
P16	4673	5749	648.80	15.49	633.31	
P17	4584	6006	654.64	22.80	631.84	
P22	4636	6732	634.30	5.24	629.06	
P23	4689	7018	636.18	6.48	629.70	
P24	5002	7178	636.06	5.93	630.13	
P25	5131	7510	635.01	5.32	629.69	

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOIC = top of inner casing

TOC = top of casing

NM = not measured (reason given under "Notes" column)

Table 1
Groundwater Level Gauging Points - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Piezometers (cont.)

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOC	level	Elevation	
P26	4764	7309	634.23	4.53	629.70	
P27	4904	7020	639.70	9.84	629.86	
P28	5883	7486	644.53	11.36	633.17	
P29	5738	6619	642.37	6.55	635.82	
P31	5480	7159	641.03	4.41	636.62	
P32	5746	7026	642.32	6.72	635.60	
P36	5410	6851	645.89	10.10	635.79	
P39	5940	6902	642.00	6.26	635.74	
P40	5931	7241	638.77	5.09	633.68	
P41	5663	7377	637.23	4.11	633.12	
P49	5145	6949	638.98	4.99	633.99	
P51	3876	6859	635.07	NM	NM	Could not access due to stream
P52	4100	7845	636.66	6.66	630.00	
P53	4597	8015	636.18	5.74	630.44	
P54	4936	8081	638.28	7.29	630.99	
P55	5628	7979	636.08	5.59	630.49	
P56	6405	7665	639.46	5.92	633.54	
P59	6389	6590	639.22	5.39	633.83	
P60	6111	6051	640.23	6.24	633.99	
P61	5533	5284	638.58	NM	NM	Destroyed
P62	5665	4945	637.06	NM	NM	Destroyed
P63	5483	7689	637.70	6.93	630.77	
P64	4617	7065	634.87	5.13	629.74	
P65	4615	7063	634.77	4.96	629.81	
P66	4729	7034	636.02	6.34	629.68	
P67	4732	7034	636.06	6.33	629.73	
P68	4743	7752	634.48	3.76	630.72	
P69	4741	7751	634.66	3.89	630.77	
P70	4880	7680	635.38	5.49	629.89	
P71	4876	7682	635.32	5.15	630.17	

New Piezometers - Upper Aquifer

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOC	level	Elevation	
PGCS Piezometer Sets						
P81	5577	7581	636.19	4.92	631.27	
P82	5577	7572	635.77	4.47	631.30	
P83	5577	7562	635.95	4.71	631.24	
P84	5322	7603	634.35	4.30	630.05	
P85	5326	7594	634.08	3.82	630.26	
P86	5329	7585	634.41	4.24	630.17	
P87	5121	7466	633.88	4.20	629.68	
P88	5130	7460	633.90	4.11	629.79	
P89	5137	7454	634.02	4.15	629.87	
P90	4881	7152	632.59	3.17	629.42	
P91	4889	7145	632.97	4.93	628.04	
P92	4896	7138	633.63	4.15	629.48	

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOC = top of casing

NM = not measured (reason given under "Notes" column)

Piezometers P4, P6, P12, P18, P30, P35, P37, P38, P50, and EW1 are destroyed

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Table 1
Groundwater Level Gauging Points - June 2001
American Chemical Service NPL Site
Griffith, Indiana

New Piezometers - Upper Aquifer (cont.)

Well Designation	Reference Points			6/18/01		Notes
	East	North	TOC	level	Elevation	
BWES Piezometer Pairs						
P93	5136	7067	638.79	NM	NM	Destroyed
P94	5146	7061	638.98	NM	NM	Destroyed
P95	5146	6532	638.58	6.78	631.80	
P96	5156	6537	638.39	13.55	624.84	
P97	5098	6283	638.39	6.34	632.05	
P98	5130	6279	639.35	5.01	634.34	
P99	5020	5945	644.35	12.18	632.17	
P100	5031	5948	643.93	8.68	635.25	
P101	5550	5979	650.08	16.53	633.55	
P102	5517	5996	647.18	NM	NM	Destroyed
P103	5672	6248	644.97	11.54	633.43	
P104	5639	6267	646.68	12.24	634.44	
P105	5885	6678	638.86	4.73	634.13	
P106	5871	6685	638.10	2.65	635.45	
P107	5766	7339	637.42	4.41	633.01	
P108	5757	7324	638.13	3.02	635.11	
ORC Piezometers						
ORC PZ1	5685	7574	638.57	6.71	631.86	
ORC PZ2	5758	7457	643.43	10.53	632.90	
ORC PZ3	5760	7540	640.24	7.72	632.52	
ORC PZ4	5827	7502	643.79	10.81	632.98	
ORC PZ5	5741	7753	636.21	4.56	631.65	
ORC PZ6	5759	7792	636.13	4.50	631.63	
ORC PZ7	5792	7839	635.85	4.28	631.57	
ORC PZ8	5813	7763	638.16	6.38	631.78	
ORC PZ101	5100	5595	651.19	18.43	632.76	
ORC PZ102	5331	5612	652.47	19.71	632.76	
ORC PZ103	5320	5566	653.15	20.39	632.76	
ORC PZ104	5417	5537	655.96	23.18	632.78	
ORC PZ105	5535	5722	649.71	16.58	633.13	

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOC = top of casing

NM = not measured (reason given under "Notes" column)

Table 2
Summary of Field Parameter Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Field Parameters					Oxidation-Reduction Potential (mV)
	pH (std. units)	Conductivity (S/m)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	
M1S	6.60	0.273	13.6	41	0.0	-98
M4D	7.44	0.143	14.6	57	0.0	-158
M4S	6.54	0.172	16.0	380	0.0	-75
MW06	6.57	0.361	19.5	96	0.0	-55
MW07	7.41	0.077	13.0	72	0.0	-151
MW08	7.64	0.480	12.9	13	0.0	-185
MW09R	6.99	0.093	13.2	24	2.31	-119
MW10C	6.91	0.137	12.6	275	2.15	-115
MW11	5.77	0.035	13.2	45	0.0	109
MW12	6.60	0.045	12.8	458	0.0	-78
MW13	6.75	0.109	11.7	21	1.99	-98
MW14	6.55	0.063	14.0	35	2.57	56
MW15	6.89	0.486	13.1	10	0.0	-110
MW17	6.51	0.075	13.0	0	0.0	78
MW19	7.37	0.567	14.6	23	0.0	-178
MW23	6.93	0.081	13.4	81	3.63	-105
MW24	6.91	0.099	12.2	48	2.37	-93
MW28	7.37	0.084	13.9	36	0.0	-144
MW29	6.39	0.102	12.8	21	2.81	-114
MW30	7.28	0.133	12.2	9	0.0	-170
MW31	7.41	0.079	12.6	18	0.0	-160
MW32	7.35	0.089	12.2	29	0.0	-150
MW33	6.77	0.259	12.4	20	0.0	-114
MW34	7.27	0.090	12.2	12	2.63	-142
MW37	6.54	0.033	14.2	0	2.05	-36
MW38	6.43	0.040	13.1	9	2.38	37
MW39	6.82	0.120	13.7	8	2.63	-93
MW40	6.29	0.028	13.8	17	0.0	153
MW41	6.93	0.031	15.0	102	2.53	95.
MW42	6.72	0.087	13.0	5	2.53	34
MW43	6.55	0.089	13.3	110	2.07	-79
MW44	7.35	0.078	12.6	18	2.56	-143
MW45	6.88	0.098	14.7	21	2.20	-129
MW46	6.46	0.255	13.7	35	3.41	-108
MW47	5.33	0.010	18.9	12	1.24	290
MW48	6.79	0.071	14.2	17	2.60	-116
MW49	6.72	0.067	13.6	36	2.50	-107
MW50	7.32	0.211	13.9	334	0.0	-141
MW51	7.02	0.159	12.1	436	0.0	-131
MW52	6.96	0.107	12.3	>999*	2.12	-118
MW53	6.59	0.288	11.6	31	2.19	-92
MW54R	7.47	0.101	12.9	22	0.0	-200
MW55	7.27	0.092	12.3	21	0.0	-108
MW56	7.14	0.106	13.8	17	4.73**	-150

Notes:

NTU = nephelometric turbidity units

S/m = Siemers per meter

mg/l = milligrams per liter

mV = millivolts

* Turbidity measurement high despite very clear water.

** Dissolved oxygen reading high due to contact with atmosphere

Table 3
Upper Aquifer Wells Sampled June 2001
American Chemical Service NPL Site
Griffith, Indiana

	Area of Groundwater Contamination	Well Identification	Location with Respect to Area of Groundwater Contamination	Monitoring Parameters June 2001
1	North	MW11	Upgradient	IND
2		MW12	Upgradient	IND
3		MW40	Upgradient	IND
4		MW48	Internal	IND
5		MW49	Internal	IND
6		MW39	Side Gradient	IND
7		MW37	Downgradient	IND
8		MW38	Side Gradient	IND
9	West	MW14	Internal	IND
10		MW13	Internal	IND
11		MW46	Downgradient	IND
12		M-1S	Griffith Landfill	IND
13		M-4S	Griffith Landfill	IND
14	South	MW17	Upgradient	IND
15		MW06	Internal	IND
16		MW19	Internal	IND
17		MW45	Internal	IND
18		MW41	Side Gradient	IND
19		MW44	Side Gradient	IND
20		MW47	Side Gradient	IND
21		MW15	Downgradient	IND
22		MW42	Downgradient	IND
23		MW43	Downgradient	IND

Note:

IND: Arsenic, lead, VC, benzene, chloroethane, TCE, PCE, TCA, DCE, and 1,2-DCA.

Table 4
Lower Aquifer Wells Sampled - June 2001
American Chemical Service NPL Site
Griffith, Indiana

	Well Identification	Well Screen Depth in Lower Aquifer	Location with Respect to Area of GW Contamination	Monitoring Parameters June 2001
1	MW28	Upper	Upgradient	IND
2	MW50	Upper	Upgradient	IND
3	MW7	Upper	Side Gradient	IND
4	MW10C	Upper	Internal	IND
5	MW9R	Upper	Internal	IND
6	MW29	Middle	Internal	IND
7	MW34	Lower	Internal	IND
8	MW23	Upper	Downgradient	IND
9	MW24	Upper	Downgradient	IND
10	MW52	Upper	Downgradient	IND
11	MW53	Lower	Downgradient	IND
12	MW51	Upper	Downgradient	IND
13	MW30	Middle	Downgradient	IND
14	MW33	Lower	Downgradient	IND
15	MW54R	Upper	Downgradient	IND
16	MW55	Lower	Downgradient	IND
17	MW8	Upper	Downgradient	IND
18	MW31	Middle	Downgradient	IND
19	MW32	Lower	Downgradient	IND
20	M-4D	Upper	Griffith Landfill	IND
21	MW56	Upper	Internal	IND

Notes:

IND: Arsenic, lead, VC, benzene, chloroethane, TCE, PCE, TCA, DCE, and 1,2-DCA.

GW: Groundwater

Table 5
Vertical Gradients in Lower Aquifer - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Well	Screen Interval		Separation (feet)	Lowest Measurable Gradient	Groundwater Elevation				Vertical Gradients		
	Nest	Top	Bottom		Upper	Middle	Lower	delta	Upper/ Middle	Middle/ Lower	Upper/ Lower
MW7	595.9	590.9			622.19						
PZ44	578.4	573.4	13	0.0008		622.11		-0.08	-0.0064	NA	NA
MW8	598.2	593.2			621.68						
MW31	574.6	564.6	19	0.0005		621.68					
MW32	547.3	537.3	17	0.0006			621.73	0.05		WU	0.0029
MW9R	605.9	600.9			621.94						
MW29	585.9	575.9	15	0.0007		622.09					
MW34	552.8	542.8	23	0.0004			622.10	0.15 0.01	0.0100		0.0004
MW30	585.0	575.0	13	0.0008		621.50					
MW33	556.0	546.0	19	0.0005			621.47	-0.03	NA		-0.0016
MW28	588.7	578.7			622.77						
PZ42	568.5	563.5	10	0.0010		622.67					
PZ43	554.5	549.5	9	0.0011			622.75	-0.1 0.08	-0.0098		0.0089
MW52	615.6	605.6			621.59						
MW53	555.7	545.7	50	0.0002			621.53	-0.06	NA	NA	-0.0012
MW54R	608.1	598.1			621.80						
MW55	547.6	537.6	51	0.0002			621.46	-0.34	NA	NA	-0.0067

Notes:

Water level measurements collected on June 18, 2001.

Elevation is in feet above mean sea level.

NA = Not Applicable.

WU = Within uncertainty of measurement technique.

(-) = Downward Gradient

(+) = Upward Gradient

See *September 1997 Groundwater Sampling Results Report and Groundwater Monitoring Plan* (July 1998), p. 4,
for an explanation of calculation method.

Table 6
Vertical Gradients Between Upper and Lower Aquifers - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Well Designation	Screen Interval		Screen Midpoint	Separation (feet)	Groundwater Elevation			Hydraulic Gradient
	Top	Bottom			Upper	Lower	delta	
P28	634.30	629.30	631.80	11.0	633.17			
MW8	598.20	593.20	595.70			621.68	-11.5	-1.04
P27	631.02	626.02	628.52	22.6	629.86			
MW9R	605.90	600.90	603.40			621.94	-7.9	-0.35
P8	635.36	630.36	632.86	18.0	633.89			
MW7	595.90	590.90	593.40			622.19	-11.7	-0.65

Notes:

Water level measurements collected on June 18, 2001.

Elevation is in feet above mean sea level.

(-) = Downward Gradient

(+) = Upward Gradient

See *September 1997 Groundwater Sampling Results Report and Groundwater Monitoring Plan* (July 1998), p. 4, for an explanation of calculation method.

Table 7
Summary of Organic Compound Detections in the Upper Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	M-1S		M-4S		MW-06		MW-11		MW-12		MW-13	
	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV
Benzene	4	J/	10	140	J/	190	26	320				
Chloroethane				840	D/	1300	18	720				
Tetrachloroethene												
trans-1,2-Dichloroethene												

Notes:

ug/L = micrograms per liter

BV = Baseline Value

NA = Not analyzed for this parameter

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

D = Results based on diluted sample

J = Estimated value

A blank cell indicates the parameter was
not detected.

Bold result indicates an exceedance of BV

Table 7
Summary of Organic Compound Detections in the Upper Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	MW-14		MW-15		MW-17		MW-19		MW-37		MW-38	
	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV	Jun-01	BV
Benzene			1	J/	10			6	J/	10		
Chloroethane								28		20		
Tetrachloroethene					6	J/	10					
trans-1,2-Dichloroethene												

Notes:

ug/L = micrograms per liter

BV = Baseline Value

NA = Not analyzed for this parameter

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

D = Results based on diluted sample

J = Estimated value

A blank cell indicates the parameter was
not detected.

Bold result indicates an exceedance of BV

Table 7
Summary of Organic Compound Detections in the Upper Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	MW-39		MW-40		MW-41		MW-42		MW-43		MW-44	
	Jun-01	BV										
Benzene	1	J/	12									
Chloroethane												
Tetrachloroethene												
trans-1,2-Dichloroethene	3	J/	NA									

Notes:

ug/L = micrograms per liter

BV = Baseline Value

NA = Not analyzed for this parameter

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

D = Results based on diluted sample

J = Estimated value

A blank cell indicates the parameter was
not detected.

Bold result indicates an exceedance of BV

Table 7
Summary of Organic Compound Detections in the Upper Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	MW-45		MW-46		MW-47		MW-48		MW-49	
	Jun-01	BV	Jun-01	BV	Jun-01	BV	Mar-01	BV	Mar-01	BV
Benzene	39	1,045					2,800	9,500	630	D/ 6,750
Chloroethane	17	215					80	J/ 1000	91	715
Tetrachloroethene										
trans-1,2-Dichloroethene	1	J/ NA								

Notes:

ug/L = micrograms per liter

BV = Baseline Value

NA = Not analyzed for this parameter

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

D = Results based on diluted sample

J = Estimated value

A blank cell indicates the parameter was
not detected.

Bold result indicates an exceedance of BV

Table 8
Summary of Organic Compound Detections in the Lower Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	M-4D		MW-07		MW-08		MW-09R		MW-10C		MW-23		MW-24	
	Jun-01	BV	Jun-01	BV	Jun-01	BV								
Benzene							19	J/	310	450	150			
Chloroethane							450		2,900	240	420			

Notes:

ug/L = micrograms per liter.

BV = Baseline Value

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

J = Estimated value

A blank cell indicates parameter not detected.

Bold result indicates an exceedance of BV

Table 8
Summary of Organic Compound Detections in the Lower Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	MW-28		MW-29		MW-30		MW-31		MW-32		MW-33		MW-34	
	Jun-01	BV												
Benzene														
Chloroethane			3	J/	10									

Notes:

ug/L = micrograms per liter.

BV = Baseline Value

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

J = Estimated value

A blank cell indicates parameter not detected.

Bold result indicates an exceedance of BV

Table 8
Summary of Organic Compound Detections in the Lower Aquifer
Validated Results - June 2001
American Chemical Service NPL Site
Griffith, Indiana

Parameter (VOCs - ug/L)	MW-50		MW-51		MW-52		MW-53		MW-54R		MW-55		MW56	
	Jun-01	BV												
Benzene							6	J/	10					
Chloroethane														

Notes:

ug/L = micrograms per liter.

BV = Baseline Value

J/_ = Data qualifier added by laboratory

_J = Data qualifier added by data validator

J = Estimated value

A blank cell indicates parameter not detected.

Bold result indicates an exceedance of BV

Table 9
Summary of Inorganic Baseline Exceedances - June 2001
American Chemical Service NPL Site
Griffith, Indiana

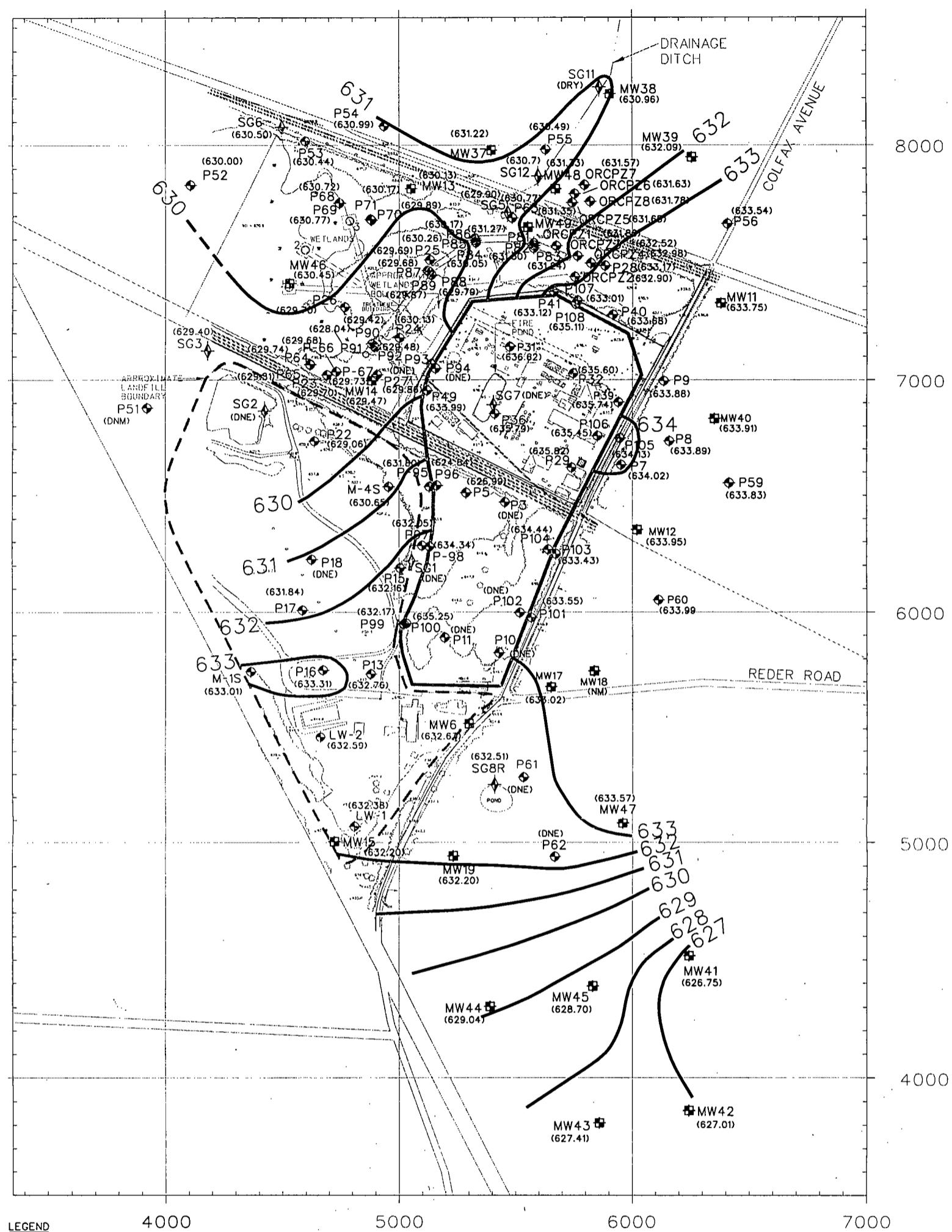
Well	Potentially Significant Sep-00	Potentially Significant Jun-01	Arsenic		Lead		Total Number of EXCEEDANCES
			Jun-01	Baseline	Jun-01	Baseline	
UPPER AQUIFER WELLS							
M-1S							0
M-4S							0
MW-06							0
MW-11			2.2	2.0			1
MW-12							0
MW-13							0
MW-14							0
MW-15							0
MW-17							0
MW-19							0
MW-37							0
MW-38			7.9	5.6			1
MW-39							0
MW-40							0
MW-41							0
MW-42							0
MW-43							0
MW-44							0
MW-45							0
MW-46							0
MW-47							0
MW-48							0
MW-49							0
LOWER AQUIFER WELL							
M-4D							0
MW-07							0
MW-08							0
MW-09R							0
MW-10C							0
MW-23							0
MW-24							0
MW-28							0
MW-29							0
MW-30							0
MW-31							0
MW-32							0
MW-33					1.7	1.5	1
MW-34							0
MW-50							0
MW-51							0
MW-52							0
MW-53							0
MW-54R							0
MW-55							0
MW-56							0
Number of Exceedances		2		1			3

Notes:

1. No results for inorganic species in the June 2001 sampling results exceeded the maximum baseline concentration for that species by a factor of 2x or more.
2. Blank cells indicate that for the June 2001 sampling round, the inorganic species did not exceed the baseline maximum.
3. The monitoring wells listed above were analyzed for Arsenic and Lead during June 2001.
4. R = Recurrence: Sample results are potentially significant due to recurrence of exceedance.
5. F = Frequency: Sample results are potentially significant due to the frequency of exceedance (>25% or 7 individual analytes).
6. M = Magnitude: Sample results are potentially significant due to magnitude of exceedance (>2x maximum baseline)



		DESIGNED	CAS	DATE	5/5/2001	SCALE	
		CHECKED	S&F	DATE		AS SHOWN	
		APPROVED	PJV	DATE			
REV	DATE	BY	DESCRIPTION				
							MWH
						AMERICAN CHEMICAL SERVICES, INC.	UPPER AQUIFER WATER TABLE MAP
						NPL SITE	JUNE 2001
						GRIFFITH, INDIANA	1



UPPER AQUIFER WELL LOCATION
AND DESIGNATION

**PIEZOMETER LOCATION
AND DESIGNATION**

**STAT GAUGE
AND DESIGNATION**

WATER CONTAINMENT SYSTEM

AND DESIGNATION

(DNM) DID NOT MEASURE DETERMINATION OF THE POTENTIOMETRIC SURFACE

(DNE) DOES NOT EXIST

**630 — GROUNDWATER ELEVATION CONTOUR BASED
ON GROUNDWATER ELEVATION DATA (DASHED
WILDER INCORPORATED)**

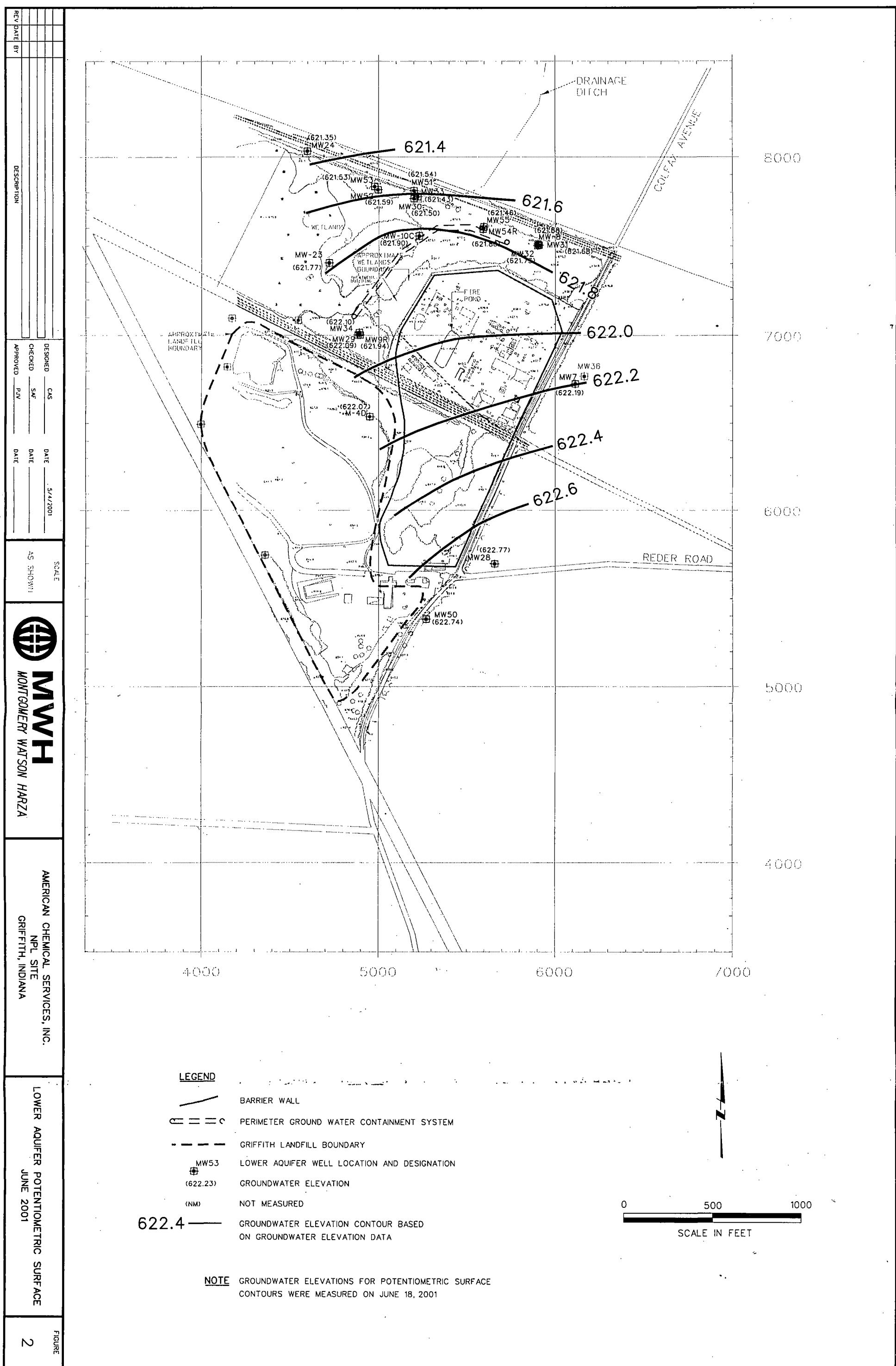
BARRIER-WALL

— — — APPROXIMATE LANDFILL BOUNDARY
— — — PERIMETER GROUND WATER CONT.

NOTES

1. GROUNDWATER ELEVATIONS FOR WATER TABLE CONTOURS
WERE MEASURED AT THE SITE ON JUNE 18, 2001.

A horizontal scale bar with numerical markings at 0, 500, and 1000.



JOB No. 2090603

FILE: J:/209/0603.acs/JUNE_2001/MWDWGs/lower_contour3d.dgn

DESIGNED	CAS	DATE
CHECKED	SAF	DATE
APPROVED	P.I.V.	DATE

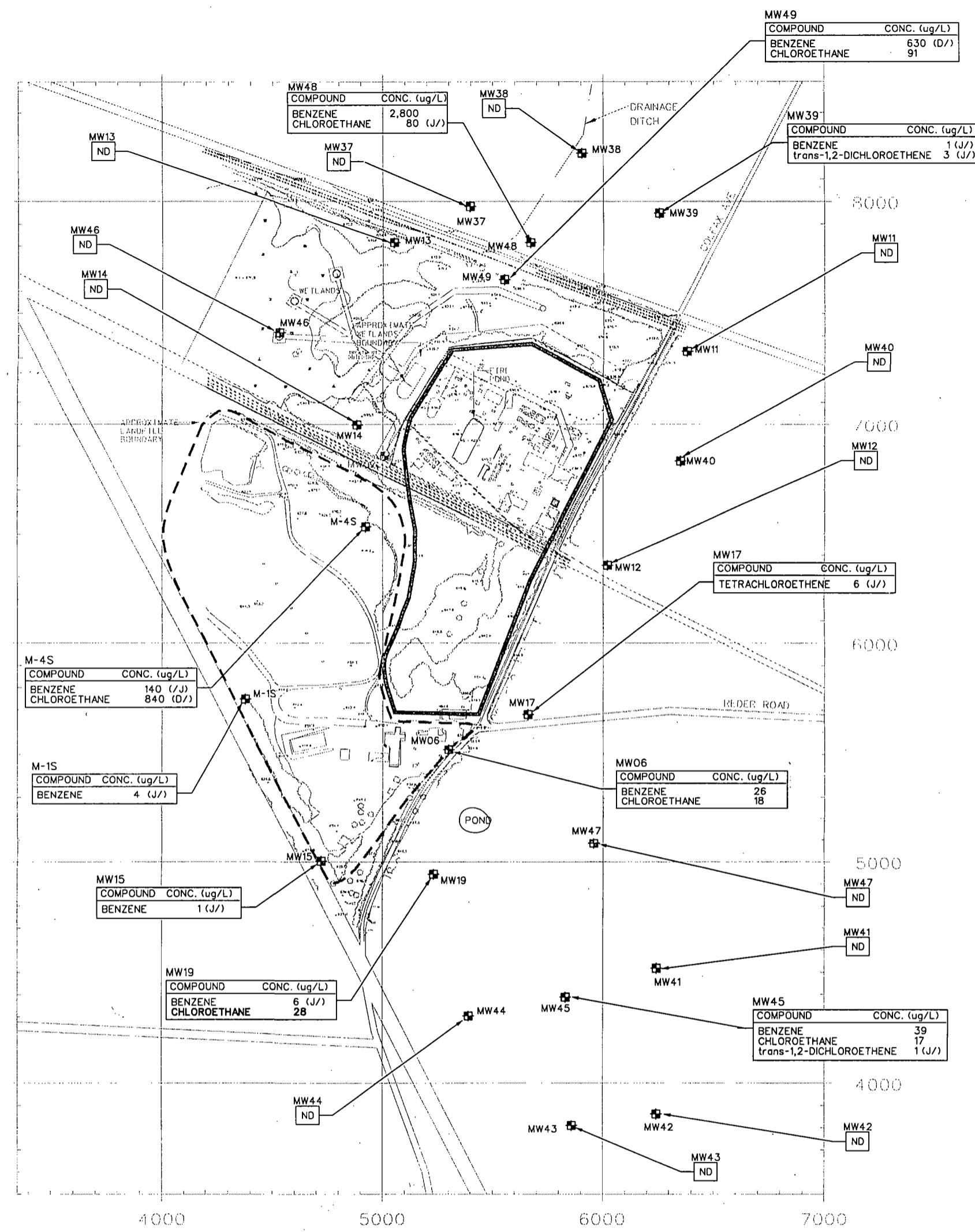
5/4/2001



MWH
MONTGOMERY WATSON HOLLOWAY

ON HARZA

AMERICAN CHEMICAL SERVICES, INC.
NPL SITE
GRIFFITH, INDIANA



LEGEND

-  UPPER AQUIFER WELL LOCATION
AND DESIGNATION

 BARRIER WALL

 APPROXIMATE LANDFILL BOUNDARY

 PERIMETER GROUND WATER CONTAINMENT SYSTEM

ug/L MICROGRAMS PER LITER

(J) INDICATES AN ESTIMATED VALUE (LAB/VALIDATED)

(D) INDICATES SAMPLE WAS DILUTED (LAB/VALIDATED)

ND NO VOC DETECTED

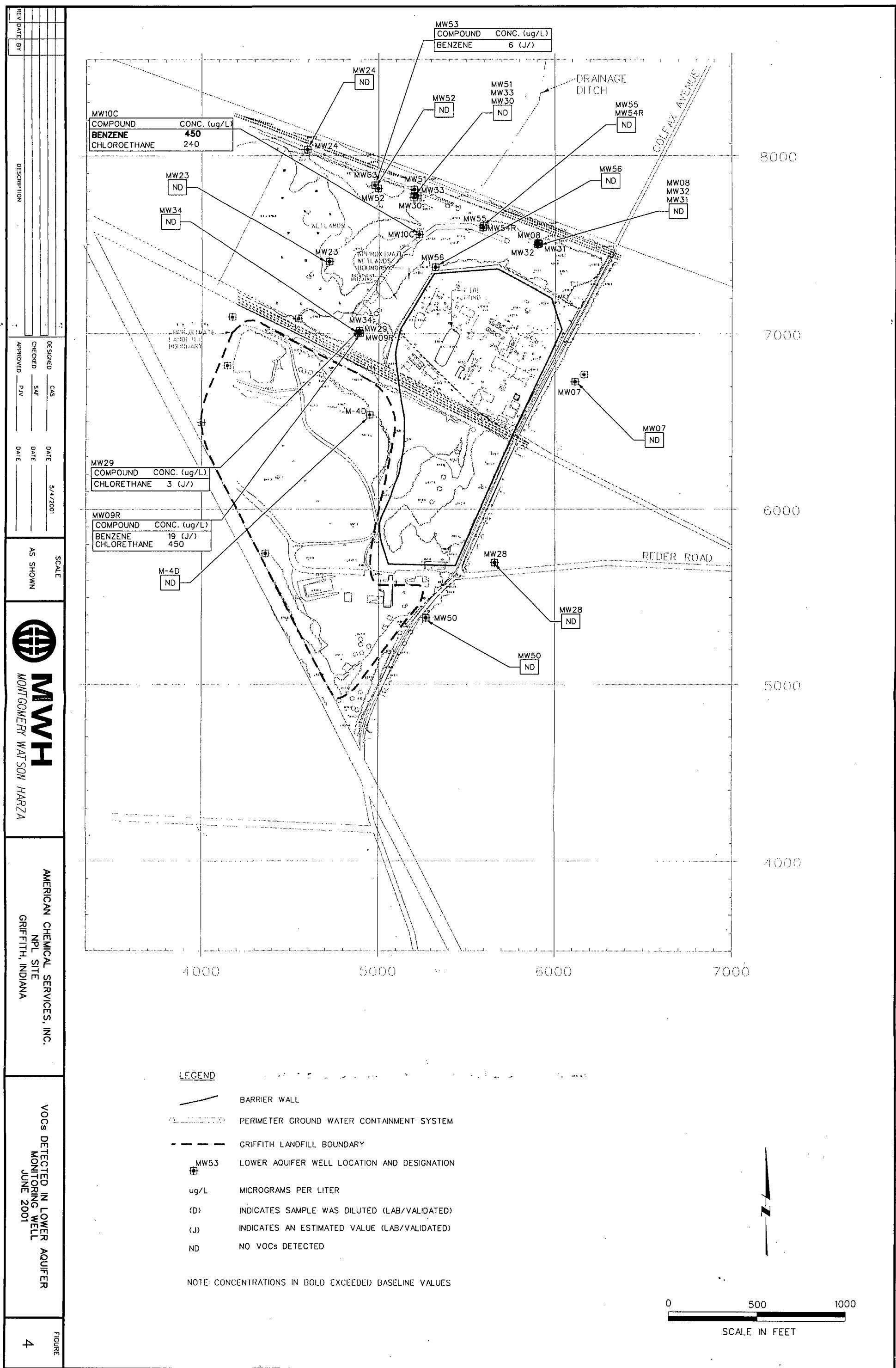
NOTE: CONCENTRATIONS IN BOLD EXCEEDED BASELINE VALUES.

0 500 1000

SCALE IN FEET

2090603

File: J:/209/0603_acs/junp_2001/upper_spidy4d.dan



JOB No. 2090603

FILE: J:/209/0603.acs/june 2001/lower_spidy4d.dgn





APPENDIX A

**COMPARISON OF JUNE 2001 RESULTS
TO BASELINE MAXIMUM CONCENTRATIONS**

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
M-1S	1,1,1-Trichloroethane	UG/L	10		U		10
M-1S	1,1,2-Trichloroethane	UG/L	10		U		10
M-1S	1,1-Dichloroethene	UG/L	10		U		10
M-1S	Benzene	UG/L	10	4	J		10
M-1S	Chloroethane	UG/L	10		U		10
M-1S	cis-1,2-Dichloroethene	UG/L			U		10
M-1S	Tetrachloroethene	UG/L	10		U		10
M-1S	trans-1,2-Dichloroethene	UG/L			U		10
M-1S	Trichloroethene	UG/L	10		U		10
M-1S	Vinyl chloride	UG/L	10		U		10
M-4D	1,1,1-Trichloroethane	UG/L	10		U		10
M-4D	1,1,2-Trichloroethane	UG/L	10		U		10
M-4D	1,1-Dichloroethene	UG/L	10		U		10
M-4D	Benzene	UG/L	10		U		10
M-4D	Chloroethane	UG/L	10		U		10
M-4D	cis-1,2-Dichloroethene	UG/L			U		10
M-4D	Tetrachloroethene	UG/L	10		U		10
M-4D	trans-1,2-Dichloroethene	UG/L			U		10
M-4D	Trichloroethene	UG/L	10		U		10
M-4D	Vinyl chloride	UG/L	10		U		10
M-4S	1,1,1-Trichloroethane	UG/L	100		U		10
M-4S	1,1,2-Trichloroethane	UG/L	100		U		10
M-4S	1,1-Dichloroethene	UG/L	100		U		10
M-4S	Benzene	UG/L	190	140	J		10
M-4S	Chloroethane	UG/L	1,300	840	D		100
M-4S	cis-1,2-Dichloroethene	UG/L			U		10
M-4S	Tetrachloroethene	UG/L	100		U		10
M-4S	trans-1,2-Dichloroethene	UG/L			U		10
M-4S	Trichloroethene	UG/L	100		U		10
M-4S	Vinyl chloride	UG/L	100		U		10
MW-06	1,1,1-Trichloroethane	UG/L	50		U		10
MW-06	1,1,2-Trichloroethane	UG/L	50		U		10
MW-06	1,1-Dichloroethene	UG/L	50		U		10
MW-06	Benzene	UG/L	320	26			10
MW-06	Chloroethane	UG/L	720	18			10
MW-06	cis-1,2-Dichloroethene	UG/L			U		10
MW-06	Tetrachloroethene	UG/L	50		U		10
MW-06	trans-1,2-Dichloroethene	UG/L			U		10
MW-06	Trichloroethene	UG/L	50		U		10
MW-06	Vinyl chloride	UG/L	50		U		10
MW-07	1,1,1-Trichloroethane	UG/L	10		U		10
MW-07	1,1,2-Trichloroethane	UG/L	10		U		10
MW-07	1,1-Dichloroethene	UG/L	10		U		10
MW-07	Benzene	UG/L	10		U		10
MW-07	Chloroethane	UG/L	10		U		10
MW-07	cis-1,2-Dichloroethene	UG/L			U		10

Exceedance = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-07	Tetrachloroethene	UG/L	10		U		10
MW-07	trans-1,2-Dichloroethene	UG/L			U		10
MW-07	Trichloroethene	UG/L	10		U		10
MW-07	Vinyl chloride	UG/L	10		U		10
MW-08	1,1,1-Trichloroethane	UG/L	10		U		10
MW-08	1,1,2-Trichloroethane	UG/L	10		U		10
MW-08	1,1-Dichloroethene	UG/L	10		U		10
MW-08	Benzene	UG/L	10		U		10
MW-08	Chloroethane	UG/L	10		U		10
MW-08	cis-1,2-Dichloroethene	UG/L			U		10
MW-08	Tetrachloroethene	UG/L	10		U		10
MW-08	trans-1,2-Dichloroethene	UG/L			U		10
MW-08	Trichloroethene	UG/L	10		U		10
MW-08	Vinyl chloride	UG/L	10		U		10
MW-09R	1,1,1-Trichloroethane	UG/L	200		U		50
MW-09R	1,1,2-Trichloroethane	UG/L	200		U		50
MW-09R	1,1-Dichloroethene	UG/L	200		U		50
MW-09R	Benzene	UG/L	310	19	J		50
MW-09R	Chloroethane	UG/L	2,900	450			50
MW-09R	cis-1,2-Dichloroethene	UG/L			U		50
MW-09R	Tetrachloroethene	UG/L	200		U		50
MW-09R	trans-1,2-Dichloroethene	UG/L			U		50
MW-09R	Trichloroethene	UG/L	200		U		50
MW-09R	Vinyl chloride	UG/L	200		U		50
MW-10C	1,1,1-Trichloroethane	UG/L	150		U		50
MW-10C	1,1,2-Trichloroethane	UG/L	150		U		50
MW-10C	1,1-Dichloroethene	UG/L	150		U		50
MW-10C	Benzene	UG/L	150	450			50
MW-10C	Chloroethane	UG/L	420	240			50
MW-10C	cis-1,2-Dichloroethene	UG/L			U		50
MW-10C	Tetrachloroethene	UG/L	150		U		50
MW-10C	trans-1,2-Dichloroethene	UG/L			U		50
MW-10C	Trichloroethene	UG/L	150		U		50
MW-10C	Vinyl chloride	UG/L	129		U		50
MW-11	1,1,1-Trichloroethane	UG/L	10		U		10
MW-11	1,1,2-Trichloroethane	UG/L	10		U		10
MW-11	1,1-Dichloroethene	UG/L	10		U		10
MW-11	Benzene	UG/L	10		U		10
MW-11	Chloroethane	UG/L	10		U		10
MW-11	cis-1,2-Dichloroethene	UG/L			U		10
MW-11	Tetrachloroethene	UG/L	10		U		10
MW-11	trans-1,2-Dichloroethene	UG/L			U		10
MW-11	Trichloroethene	UG/L	10		U		10
MW-11	Vinyl chloride	UG/L	10		U		10
MW-12	1,1,1-Trichloroethane	UG/L	10		U		10
MW-12	1,1,2-Trichloroethane	UG/L	10		U		10

BOLD = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-12	1,1-Dichloroethene	UG/L	10	U			10
MW-12	Benzene	UG/L	10	U			10
MW-12	Chloroethane	UG/L	10	U			10
MW-12	cis-1,2-Dichloroethene	UG/L		U			10
MW-12	Tetrachloroethene	UG/L	10	U			10
MW-12	trans-1,2-Dichloroethene	UG/L		U			10
MW-12	Trichloroethene	UG/L	10	U			10
MW-12	Vinyl chloride	UG/L	10	U			10
MW-13	1,1,1-Trichloroethane	UG/L	50	U			10
MW-13	1,1,2-Trichloroethane	UG/L	50	U			10
MW-13	1,1-Dichloroethene	UG/L	50	U			10
MW-13	Benzene	UG/L	610	U			10
MW-13	Chloroethane	UG/L	570	U			10
MW-13	cis-1,2-Dichloroethene	UG/L		U			10
MW-13	Tetrachloroethene	UG/L	50	U			10
MW-13	trans-1,2-Dichloroethene	UG/L		U			10
MW-13	Trichloroethene	UG/L	50	U			10
MW-13	Vinyl chloride	UG/L	50	U			10
MW-14	1,1,1-Trichloroethane	UG/L	100	U			10
MW-14	1,1,2-Trichloroethane	UG/L	100	U			10
MW-14	1,1-Dichloroethene	UG/L	100	U			10
MW-14	Benzene	UG/L	41	U			10
MW-14	Chloroethane	UG/L	1,000	U			10
MW-14	cis-1,2-Dichloroethene	UG/L		U			10
MW-14	Tetrachloroethene	UG/L	100	U			10
MW-14	trans-1,2-Dichloroethene	UG/L		U			10
MW-14	Trichloroethene	UG/L	100	U			10
MW-14	Vinyl chloride	UG/L	100	U			10
MW-15	1,1,1-Trichloroethane	UG/L	10	U			10
MW-15	1,1,2-Trichloroethane	UG/L	10	U			10
MW-15	1,1-Dichloroethene	UG/L	10	U			10
MW-15	Benzene	UG/L	10	1	J		10
MW-15	Chloroethane	UG/L	10	U			10
MW-15	cis-1,2-Dichloroethene	UG/L		U			10
MW-15	Tetrachloroethene	UG/L	10	U			10
MW-15	trans-1,2-Dichloroethene	UG/L		U			10
MW-15	Trichloroethene	UG/L	10	U			10
MW-15	Vinyl chloride	UG/L	10	U			10
MW-17	1,1,1-Trichloroethane	UG/L		U			10
MW-17	1,1,2-Trichloroethane	UG/L		U			10
MW-17	1,1-Dichloroethene	UG/L		U			10
MW-17	Benzene	UG/L		U			10
MW-17	Chloroethane	UG/L		U			10
MW-17	cis-1,2-Dichloroethene	UG/L		U			10
MW-17	Tetrachloroethene	UG/L	6	J			10
MW-17	trans-1,2-Dichloroethene	UG/L		U			10

BOLD = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-17	Trichloroethene	UG/L			U		10
MW-17	Vinyl chloride	UG/L			U		10
MW-19	1,1,1-Trichloroethane	UG/L	10		U		10
MW-19	1,1,2-Trichloroethane	UG/L	10		U		10
MW-19	1,1-Dichloroethene	UG/L	10		U		10
MW-19	Benzene	UG/L	10	6	J		10
MW-19	Chloroethane	UG/L	20	28			10
MW-19	cis-1,2-Dichloroethene	UG/L			U		10
MW-19	Tetrachloroethene	UG/L	10		U		10
MW-19	trans-1,2-Dichloroethene	UG/L			U		10
MW-19	Trichloroethene	UG/L	10		U		10
MW-19	Vinyl chloride	UG/L	10		U		10
MW-23	1,1,1-Trichloroethane	UG/L	10		U		10
MW-23	1,1,2-Trichloroethane	UG/L	10		U		10
MW-23	1,1-Dichloroethene	UG/L	10		U		10
MW-23	Benzene	UG/L	10		U		10
MW-23	Chloroethane	UG/L	10		U		10
MW-23	cis-1,2-Dichloroethene	UG/L			U		10
MW-23	Tetrachloroethene	UG/L	10		U		10
MW-23	trans-1,2-Dichloroethene	UG/L			U		10
MW-23	Trichloroethene	UG/L	10		U		10
MW-23	Vinyl chloride	UG/L	10		U		10
MW-24	1,1,1-Trichloroethane	UG/L	10		U		10
MW-24	1,1,2-Trichloroethane	UG/L	10		U		10
MW-24	1,1-Dichloroethene	UG/L	10		U		10
MW-24	Benzene	UG/L	10		U		10
MW-24	Chloroethane	UG/L	10		U		10
MW-24	cis-1,2-Dichloroethene	UG/L			U		10
MW-24	Tetrachloroethene	UG/L	10		U		10
MW-24	trans-1,2-Dichloroethene	UG/L			U		10
MW-24	Trichloroethene	UG/L	10		U		10
MW-24	Vinyl chloride	UG/L	10		U		10
MW-28	1,1,1-Trichloroethane	UG/L	10		U		10
MW-28	1,1,2-Trichloroethane	UG/L	10		U		10
MW-28	1,1-Dichloroethene	UG/L	10		U		10
MW-28	Benzene	UG/L	10		U		10
MW-28	Chloroethane	UG/L	10		U		10
MW-28	cis-1,2-Dichloroethene	UG/L			U		10
MW-28	Tetrachloroethene	UG/L	10		U		10
MW-28	trans-1,2-Dichloroethene	UG/L			U		10
MW-28	Trichloroethene	UG/L	10		U		10
MW-28	Vinyl chloride	UG/L	10		U		10
MW-29	1,1,1-Trichloroethane	UG/L	10		U		10
MW-29	1,1,2-Trichloroethane	UG/L	10		U		10
MW-29	1,1-Dichloroethene	UG/L	10		U		10
MW-29	Benzene	UG/L	10		U		10

BOLD = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-29	Chloroethane	UG/L	10	3	J		10
MW-29	cis-1,2-Dichloroethene	UG/L			U		10
MW-29	Tetrachloroethene	UG/L	10		U		10
MW-29	trans-1,2-Dichloroethene	UG/L			U		10
MW-29	Trichloroethene	UG/L	10		U		10
MW-29	Vinyl chloride	UG/L	10		U		10
MW-30	1,1,1-Trichloroethane	UG/L	10		U		10
MW-30	1,1,2-Trichloroethane	UG/L	10		U		10
MW-30	1,1-Dichloroethene	UG/L	10		U		10
MW-30	Benzene	UG/L	10		U		10
MW-30	Chloroethane	UG/L	10		U		10
MW-30	cis-1,2-Dichloroethene	UG/L			U		10
MW-30	Tetrachloroethene	UG/L	10		U		10
MW-30	trans-1,2-Dichloroethene	UG/L			U		10
MW-30	Trichloroethene	UG/L	10		U		10
MW-30	Vinyl chloride	UG/L	10		U		10
MW-31	1,1,1-Trichloroethane	UG/L	10		U		10
MW-31	1,1,2-Trichloroethane	UG/L	10		U		10
MW-31	1,1-Dichloroethene	UG/L	10		U		10
MW-31	Benzene	UG/L	10		U		10
MW-31	Chloroethane	UG/L	10		U		10
MW-31	cis-1,2-Dichloroethene	UG/L			U		10
MW-31	Tetrachloroethene	UG/L	10		U		10
MW-31	trans-1,2-Dichloroethene	UG/L			U		10
MW-31	Trichloroethene	UG/L	10		U		10
MW-31	Vinyl chloride	UG/L	10		U		10
MW-32	1,1,1-Trichloroethane	UG/L	10		U		10
MW-32	1,1,2-Trichloroethane	UG/L	10		U		10
MW-32	1,1-Dichloroethene	UG/L	10		U		10
MW-32	Benzene	UG/L	10		U		10
MW-32	Chloroethane	UG/L	10		U		10
MW-32	cis-1,2-Dichloroethene	UG/L			U		10
MW-32	Tetrachloroethene	UG/L	10		U		10
MW-32	trans-1,2-Dichloroethene	UG/L			U		10
MW-32	Trichloroethene	UG/L	10		U		10
MW-32	Vinyl chloride	UG/L	10		U		10
MW-33	1,1,1-Trichloroethane	UG/L	10		U		10
MW-33	1,1,2-Trichloroethane	UG/L	10		U		10
MW-33	1,1-Dichloroethene	UG/L	10		U		10
MW-33	Benzene	UG/L	10		U		10
MW-33	Chloroethane	UG/L	10		U		10
MW-33	cis-1,2-Dichloroethene	UG/L			U		10
MW-33	Tetrachloroethene	UG/L	10		U		10
MW-33	trans-1,2-Dichloroethene	UG/L			U		10
MW-33	Trichloroethene	UG/L	10		U		10
MW-33	Vinyl chloride	UG/L	10		U		10

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NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-34	1,1,1-Trichloroethane	UG/L	10		U		10
MW-34	1,1,2-Trichloroethane	UG/L	10		U		10
MW-34	1,1-Dichloroethene	UG/L	10		U		10
MW-34	Benzene	UG/L	10		U		10
MW-34	Chloroethane	UG/L	10		U		10
MW-34	cis-1,2-Dichloroethene	UG/L			U		10
MW-34	Tetrachloroethene	UG/L	10		U		10
MW-34	trans-1,2-Dichloroethene	UG/L			U		10
MW-34	Trichloroethene	UG/L	10		U		10
MW-34	Vinyl chloride	UG/L	10		U		10
MW-37	1,1,1-Trichloroethane	UG/L	10		U		10
MW-37	1,1,2-Trichloroethane	UG/L	10		U		10
MW-37	1,1-Dichloroethene	UG/L	10		U		10
MW-37	Benzene	UG/L	10		U		10
MW-37	Chloroethane	UG/L	10		U		10
MW-37	cis-1,2-Dichloroethene	UG/L			U		10
MW-37	Tetrachloroethene	UG/L	10		U		10
MW-37	trans-1,2-Dichloroethene	UG/L			U		10
MW-37	Trichloroethene	UG/L	10		U		10
MW-37	Vinyl chloride	UG/L	10		U		10
MW-38	1,1,1-Trichloroethane	UG/L	10		U		10
MW-38	1,1,2-Trichloroethane	UG/L	10		U		10
MW-38	1,1-Dichloroethene	UG/L	10		U		10
MW-38	Benzene	UG/L	10		U		10
MW-38	Chloroethane	UG/L	10		U		10
MW-38	cis-1,2-Dichloroethene	UG/L			U		10
MW-38	Tetrachloroethene	UG/L	10		U		10
MW-38	trans-1,2-Dichloroethene	UG/L			U		10
MW-38	Trichloroethene	UG/L	10		U		10
MW-38	Vinyl chloride	UG/L	10		U		10
MW-39	1,1,1-Trichloroethane	UG/L	10		U		10
MW-39	1,1,2-Trichloroethane	UG/L	10		U		10
MW-39	1,1-Dichloroethene	UG/L	10		U		10
MW-39	Benzene	UG/L	12	1	J		10
MW-39	Chloroethane	UG/L	10		U		10
MW-39	cis-1,2-Dichloroethene	UG/L			U		10
MW-39	Tetrachloroethene	UG/L	10		U		10
MW-39	trans-1,2-Dichloroethene	UG/L		3	J		10
MW-39	Trichloroethene	UG/L	10		U		10
MW-39	Vinyl chloride	UG/L	10		U		10
MW-40	1,1,1-Trichloroethane	UG/L	10		U		10
MW-40	1,1,2-Trichloroethane	UG/L	10		U		10
MW-40	1,1-Dichloroethene	UG/L	10		U		10
MW-40	Benzene	UG/L	10		U		10
MW-40	Chloroethane	UG/L	10		U		10
MW-40	cis-1,2-Dichloroethene	UG/L			U		10

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Comparison of Results to Baseline Highest Detections

June 2001

American Chemical Services NPL Site

Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detec Limit
MW-40	Tetrachloroethene	UG/L	10		U		10
MW-40	trans-1,2-Dichloroethene	UG/L			U		10
MW-40	Trichloroethene	UG/L	10		U		10
MW-40	Vinyl chloride	UG/L	10		U		10
MW-41	1,1,1-Trichloroethane	UG/L	10		U		10
MW-41	1,1,2-Trichloroethane	UG/L	10		U		10
MW-41	1,1-Dichloroethene	UG/L	10		U		10
MW-41	Benzene	UG/L	10		U		10
MW-41	Chloroethane	UG/L	10		U		10
MW-41	cis-1,2-Dichloroethene	UG/L			U		10
MW-41	Tetrachloroethene	UG/L	10		U		10
MW-41	trans-1,2-Dichloroethene	UG/L			U		10
MW-41	Trichloroethene	UG/L	10		U		10
MW-41	Vinyl chloride	UG/L	10		U		10
MW-42	1,1,1-Trichloroethane	UG/L	10		U		10
MW-42	1,1,2-Trichloroethane	UG/L	10		U		10
MW-42	1,1-Dichloroethene	UG/L	10		U		10
MW-42	Benzene	UG/L	10		U		10
MW-42	Chloroethane	UG/L	10		U		10
MW-42	cis-1,2-Dichloroethene	UG/L			U		10
MW-42	Tetrachloroethene	UG/L	10		U		10
MW-42	trans-1,2-Dichloroethene	UG/L			U		10
MW-42	Trichloroethene	UG/L	10		U		10
MW-42	Vinyl chloride	UG/L	10		U		10
MW-43	1,1,1-Trichloroethane	UG/L	10		U		10
MW-43	1,1,2-Trichloroethane	UG/L	10		U		10
MW-43	1,1-Dichloroethene	UG/L	10		U		10
MW-43	Benzene	UG/L	10		U		10
MW-43	Chloroethane	UG/L	10		U		10
MW-43	cis-1,2-Dichloroethene	UG/L			U		10
MW-43	Tetrachloroethene	UG/L	10		U		10
MW-43	trans-1,2-Dichloroethene	UG/L			U		10
MW-43	Trichloroethene	UG/L	10		U		10
MW-43	Vinyl chloride	UG/L	10		U		10
MW-44	1,1,1-Trichloroethane	UG/L	10		U		10
MW-44	1,1,2-Trichloroethane	UG/L	10		U		10
MW-44	1,1-Dichloroethene	UG/L	10		U		10
MW-44	Benzene	UG/L	10		U		10
MW-44	Chloroethane	UG/L	10		U		10
MW-44	cis-1,2-Dichloroethene	UG/L			U		10
MW-44	Tetrachloroethene	UG/L	10		U		10
MW-44	trans-1,2-Dichloroethene	UG/L			U		10
MW-44	Trichloroethene	UG/L	10		U		10
MW-44	Vinyl chloride	UG/L	10		U		10
MW-45	1,1,1-Trichloroethane	UG/L	80		U		10
MW-45	1,1,2-Trichloroethane	UG/L	80		U		10

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NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-45	1,1-Dichloroethene	UG/L	80		U		10
MW-45	Benzene	UG/L	1,045	39			10
MW-45	Chloroethane	UG/L	215	17			10
MW-45	cis-1,2-Dichloroethene	UG/L			U		10
MW-45	Tetrachloroethene	UG/L	80		U		10
MW-45	trans-1,2-Dichloroethene	UG/L		1	J		10
MW-45	Trichloroethene	UG/L	80		U		10
MW-45	Vinyl chloride	UG/L	80		U		10
MW-46	1,1,1-Trichloroethane	UG/L	10		U		10
MW-46	1,1,2-Trichloroethane	UG/L	10		U		10
MW-46	1,1-Dichloroethene	UG/L	10		U		10
MW-46	Benzene	UG/L	10		U		10
MW-46	Chloroethane	UG/L	10		U		10
MW-46	cis-1,2-Dichloroethene	UG/L			U		10
MW-46	Tetrachloroethene	UG/L	10		U		10
MW-46	trans-1,2-Dichloroethene	UG/L			U		10
MW-46	Trichloroethene	UG/L	10		U		10
MW-46	Vinyl chloride	UG/L	10		U		10
MW-47	1,1,1-Trichloroethane	UG/L	10		U		10
MW-47	1,1,2-Trichloroethane	UG/L	10		U		10
MW-47	1,1-Dichloroethene	UG/L	10		U		10
MW-47	Benzene	UG/L	10		U		10
MW-47	Chloroethane	UG/L	10		U		10
MW-47	cis-1,2-Dichloroethene	UG/L			U		10
MW-47	Tetrachloroethene	UG/L	10		U		10
MW-47	trans-1,2-Dichloroethene	UG/L			U		10
MW-47	Trichloroethene	UG/L	10		U		10
MW-47	Vinyl chloride	UG/L	10		U		10
MW-48	1,1,1-Trichloroethane	UG/L	500		U		500
MW-48	1,1,2-Trichloroethane	UG/L	500		U		500
MW-48	1,1-Dichloroethene	UG/L	500		U		500
MW-48	Benzene	UG/L	9,500	2,800			500
MW-48	Chloroethane	UG/L	1,000	80	J		500
MW-48	cis-1,2-Dichloroethene	UG/L			U		500
MW-48	Tetrachloroethene	UG/L	500		U		500
MW-48	trans-1,2-Dichloroethene	UG/L			U		500
MW-48	Trichloroethene	UG/L	500		U		500
MW-48	Vinyl chloride	UG/L	500		U		500
MW-49	1,1,1-Trichloroethane	UG/L	500		U		10
MW-49	1,1,2-Trichloroethane	UG/L	500		U		10
MW-49	1,1-Dichloroethene	UG/L	500		U		10
MW-49	Benzene	UG/L	6,750	630	D		50
MW-49	Chloroethane	UG/L	715	91			10
MW-49	cis-1,2-Dichloroethene	UG/L			U		10
MW-49	Tetrachloroethene	UG/L	500		U		10
MW-49	trans-1,2-Dichloroethene	UG/L			U		10

BOLD = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections

June 2001

**American Chemical Services NPL Site
Griffith, Indiana**

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-49	Trichloroethene	UG/L	500		U		10
MW-49	Vinyl chloride	UG/L	500		U		10
MW-50	1,1,1-Trichloroethane	UG/L	10		U		10
MW-50	1,1,2-Trichloroethane	UG/L	10		U		10
MW-50	1,1-Dichloroethene	UG/L	10		U		10
MW-50	Benzene	UG/L	10		U		10
MW-50	Chloroethane	UG/L	10		U		10
MW-50	cis-1,2-Dichloroethene	UG/L			U		10
MW-50	Tetrachloroethene	UG/L	10		U		10
MW-50	trans-1,2-Dichloroethene	UG/L			U		10
MW-50	Trichloroethene	UG/L	10		U		10
MW-50	Vinyl chloride	UG/L	10		U		10
MW-51	1,1,1-Trichloroethane	UG/L	100		U		10
MW-51	1,1,2-Trichloroethane	UG/L	100		U		10
MW-51	1,1-Dichloroethene	UG/L	100		U		10
MW-51	Benzene	UG/L	100		U		10
MW-51	Chloroethane	UG/L	100		U		10
MW-51	cis-1,2-Dichloroethene	UG/L			U		10
MW-51	Tetrachloroethene	UG/L	100		U		10
MW-51	trans-1,2-Dichloroethene	UG/L			U		10
MW-51	Trichloroethene	UG/L	100		U		10
MW-51	Vinyl chloride	UG/L	100		U		10
MW-52	1,1,1-Trichloroethane	UG/L	100		U		10
MW-52	1,1,2-Trichloroethane	UG/L	100		U		10
MW-52	1,1-Dichloroethene	UG/L	100		U		10
MW-52	Benzene	UG/L	100		U		10
MW-52	Chloroethane	UG/L	100		U		10
MW-52	cis-1,2-Dichloroethene	UG/L			U		10
MW-52	Tetrachloroethene	UG/L	100		U		10
MW-52	trans-1,2-Dichloroethene	UG/L			U		10
MW-52	Trichloroethene	UG/L	100		U		10
MW-52	Vinyl chloride	UG/L	100		U		10
MW-53	1,1,1-Trichloroethane	UG/L	10		U		10
MW-53	1,1,2-Trichloroethane	UG/L	10		U		10
MW-53	1,1-Dichloroethene	UG/L	10		U		10
MW-53	Benzene	UG/L	10	6	J		10
MW-53	Chloroethane	UG/L	10		U		10
MW-53	cis-1,2-Dichloroethene	UG/L			U		10
MW-53	Tetrachloroethene	UG/L	10		U		10
MW-53	trans-1,2-Dichloroethene	UG/L			U		10
MW-53	Trichloroethene	UG/L	10		U		10
MW-53	Vinyl chloride	UG/L	10		U		10
MW-54R	1,1,1-Trichloroethane	UG/L	10		U		10
MW-54R	1,1,2-Trichloroethane	UG/L	10		U		10
MW-54R	1,1-Dichloroethene	UG/L	10		U		10
MW-54R	Benzene	UG/L	10		U		10

BOLE = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-54R	Chloroethane	UG/L	10	U			10
MW-54R	cis-1,2-Dichloroethene	UG/L		U			10
MW-54R	Tetrachloroethene	UG/L	10	U			10
MW-54R	trans-1,2-Dichloroethene	UG/L		U			10
MW-54R	Trichloroethene	UG/L	10	U			10
MW-54R	Vinyl chloride	UG/L	10	U			10
MW-55	1,1,1-Trichloroethane	UG/L	10	U			10
MW-55	1,1,2-Trichloroethane	UG/L	10	U			10
MW-55	1,1-Dichloroethene	UG/L	10	U			10
MW-55	Benzene	UG/L	10	U			10
MW-55	Chloroethane	UG/L	10	U			10
MW-55	cis-1,2-Dichloroethene	UG/L		U			10
MW-55	Tetrachloroethene	UG/L	10	U			10
MW-55	trans-1,2-Dichloroethene	UG/L		U			10
MW-55	Trichloroethene	UG/L	10	U			10
MW-55	Vinyl chloride	UG/L	10	U			10
MW-56	1,1,1-Trichloroethane	UG/L		U			10
MW-56	1,1,2-Trichloroethane	UG/L		U			10
MW-56	1,1-Dichloroethene	UG/L		U			10
MW-56	Benzene	UG/L		U			10
MW-56	Chloroethane	UG/L		U			10
MW-56	cis-1,2-Dichloroethene	UG/L		U			10
MW-56	Tetrachloroethene	UG/L		U			10
MW-56	trans-1,2-Dichloroethene	UG/L		U			10
MW-56	Trichloroethene	UG/L		U			10
MW-56	Vinyl chloride	UG/L		U			10

[REDACTED] = Exceedance

NA = Not Applicable

Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
M-1S	Arsenic	UG/L	3.0	2.8	B		10
M-1S	Lead	UG/L	2.5		U		0.9
M-4D	Arsenic	UG/L	2.5		U		2.1
M-4D	Lead	UG/L	3.1		U		0.9
M-4S	Arsenic	UG/L	6.8	3.5	B		10
M-4S	Lead	UG/L	6.1		U		0.9
MW-06	Arsenic	UG/L	72	45.2			10
MW-06	Lead	UG/L	9.6	1.2	B		3
MW-07	Arsenic	UG/L	3.5		U		2.1
MW-07	Lead	UG/L	5.8		U		0.9
MW-08	Arsenic	UG/L	6.1	4.8	B		10
MW-08	Lead	UG/L	3.4		U		0.9
MW-09R	Arsenic	UG/L	6.8		U		2.1
MW-09R	Lead	UG/L	6.7		U		0.9
MW-10C	Arsenic	UG/L	10		U		2.1
MW-10C	Lead	UG/L	19		U		0.9
MW-11	Arsenic	UG/L	2.0	2.0 2.0	B		10
MW-11	Lead	UG/L	7.9		U		0.9
MW-12	Arsenic	UG/L	7.8		U		2.1
MW-12	Lead	UG/L	12	1.1	B		3
MW-13	Arsenic	UG/L	2.0		U		2.1
MW-13	Lead	UG/L	2.3		U		0.9
MW-14	Arsenic	UG/L	11		U		2.1
MW-14	Lead	UG/L	20		U		0.9
MW-15	Arsenic	UG/L	59	55.3			10
MW-15	Lead	UG/L	2.4		U		0.9
MW-17	Arsenic	UG/L			U		2.1
MW-17	Lead	UG/L		1.9	B		3
MW-19	Arsenic	UG/L	27	20.7			10
MW-19	Lead	UG/L	3.7		U		0.9
MW-23	Arsenic	UG/L	5.3	2.4	B		10
MW-23	Lead	UG/L	7.7		U		0.9
MW-24	Arsenic	UG/L	10		U		2.1
MW-24	Lead	UG/L	25		U		0.9
MW-28	Arsenic	UG/L	4.9		U		2.1
MW-28	Lead	UG/L	12	2.1	B		3
MW-29	Arsenic	UG/L	2.9		U		2.1
MW-29	Lead	UG/L	2.4		U		0.9
MW-30	Arsenic	UG/L	4.3		U		2.1
MW-30	Lead	UG/L	8.0		U		0.9
MW-31	Arsenic	UG/L	7.5		U		2.1
MW-31	Lead	UG/L	8.9		U		0.9
MW-32	Arsenic	UG/L	4.9		U		2.1
MW-32	Lead	UG/L	11	0.92	B		3
MW-33	Arsenic	UG/L	23	16.6			10
MW-33	Lead	UG/L	1.5	1.5 1.5	B		3

[BOLD] = Exceedance

NA = Not Applicable

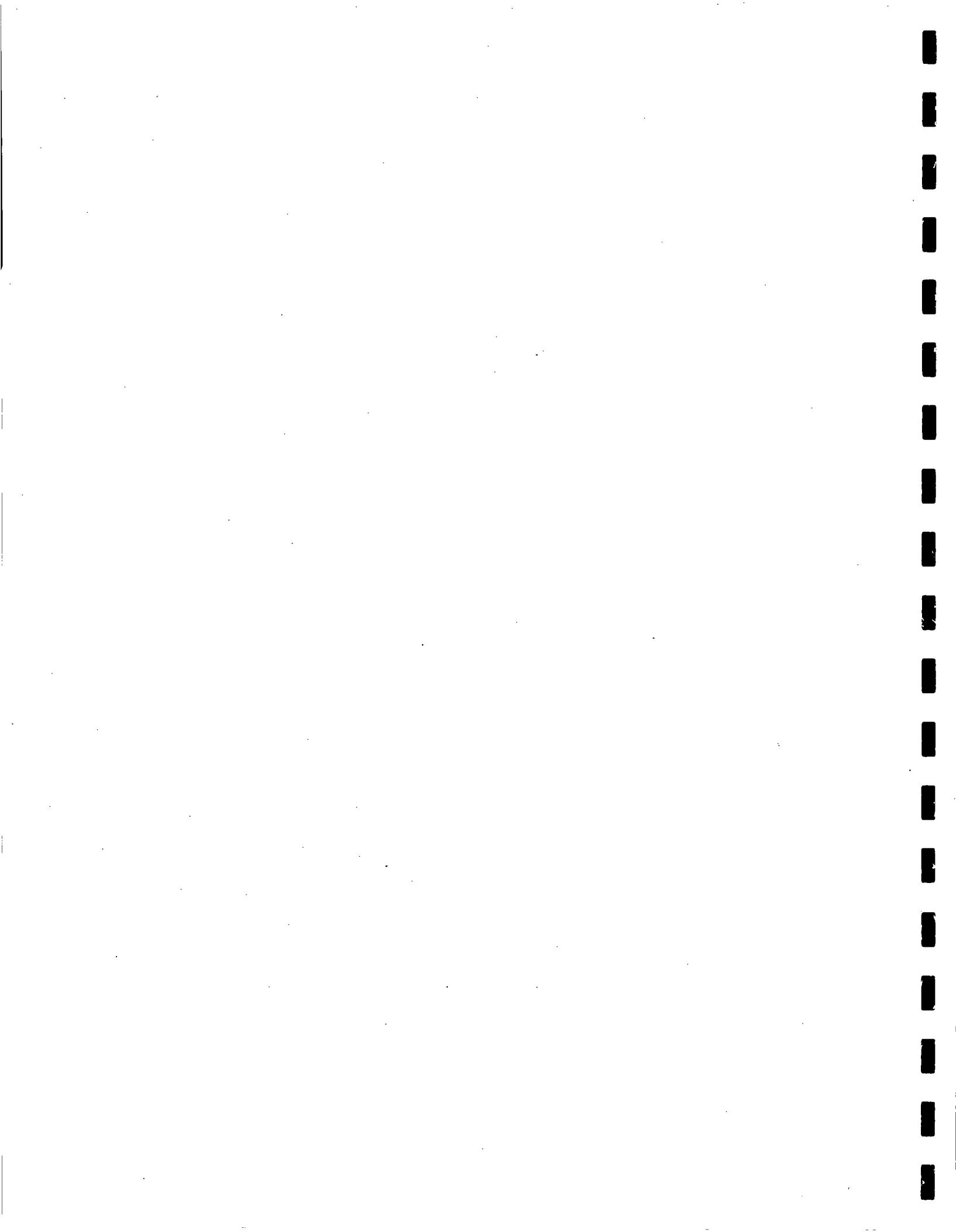
Comparison of Results to Baseline Highest Detections
June 2001
American Chemical Services NPL Site
Griffith, Indiana

Well	Analyte	Units	Highest Detect during Baseline	Current Event			
				Result	LQ	DQ	Detect Limit
MW-34	Arsenic	UG/L	2.8		U		2.1
MW-34	Lead	UG/L	3.8		U		0.9
MW-37	Arsenic	UG/L	2.5		U		2.1
MW-37	Lead	UG/L	8.6	1	B		3
MW-38	Arsenic	UG/L	5.6	7.9	B		10
MW-38	Lead	UG/L	10	3.2			3
MW-39	Arsenic	UG/L	4.3		U		2.1
MW-39	Lead	UG/L	3.5	0.92	B		3
MW-40	Arsenic	UG/L	3.8		U		2.1
MW-40	Lead	UG/L	11	1.6	B		3
MW-41	Arsenic	UG/L	3.0		U		2.1
MW-41	Lead	UG/L	13	5			3
MW-42	Arsenic	UG/L	15	2.2	B		10
MW-42	Lead	UG/L	5.7		U		0.9
MW-43	Arsenic	UG/L	81	45.5			10
MW-43	Lead	UG/L	33	4.5			3
MW-44	Arsenic	UG/L	41	7.6	B		10
MW-44	Lead	UG/L	1.5		U		0.9
MW-45	Arsenic	UG/L	44	29.3			10
MW-45	Lead	UG/L	39		U		0.9
MW-46	Arsenic	UG/L	3.7	2.9	B		10
MW-46	Lead	UG/L	5.0		U		0.9
MW-47	Arsenic	UG/L	2.0		U		2.1
MW-47	Lead	UG/L	23		U		0.9
MW-48	Arsenic	UG/L	13	5.5	B		10
MW-48	Lead	UG/L	7.7		U		0.9
MW-49	Arsenic	UG/L	38	11.1			10
MW-49	Lead	UG/L	4.4	1	B		3
MW-50	Arsenic	UG/L	7.7		U		2.1
MW-50	Lead	UG/L	14	2.1	B		3
MW-51	Arsenic	UG/L	3.9		U		2.1
MW-51	Lead	UG/L	3.9		U		0.9
MW-52	Arsenic	UG/L	125		U		2.1
MW-52	Lead	UG/L	31		U		0.9
MW-53	Arsenic	UG/L	30	4.2	B		10
MW-53	Lead	UG/L	138		U		0.9
MW-54R	Arsenic	UG/L	9.8		U		2.1
MW-54R	Lead	UG/L	10		U		0.9
MW-55	Arsenic	UG/L	13	3.6	B		10
MW-55	Lead	UG/L	46		U		0.9
MW-56	Arsenic	UG/L			U		2.1
MW-56	Lead	UG/L		0.93	B		3

BOLD = Exceedance

NA = Not Applicable





APPENDIX B
TIME TREND PLOTS

Upper Aquifer Monitoring Well: M-4S

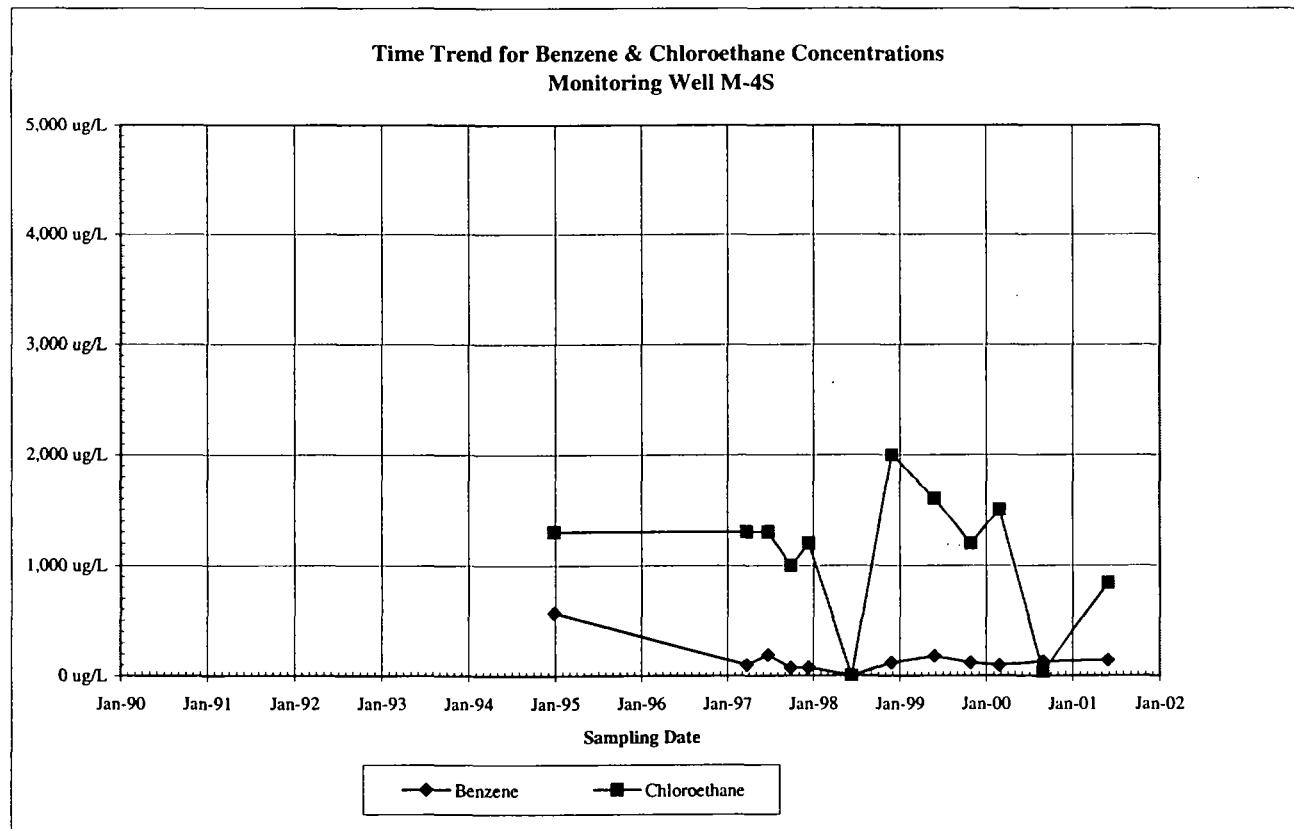
Baseline Groundwater Monitoring

ACS NPL Site

M-4S

Date	Benzene	Chloroethane
BASELINE	190	1300
January-95	570 ug/L	1,300 ug/L
March-97	98 ug/L	1,300 ug/L
June-97	190 ug/L	1,300 ug/L
October-97	73 ug/L	1,000 ug/L
December-97	75 ug/L	1,200 ug/L
June-98	BDL	BDL
December-98	120 ug/L	2,000 ug/L
June-99	180 ug/L	1,600 ug/L
November-99	120 ug/L	1,200 ug/L
March-00	96 ug/L	1,500 ug/L
September-00	130 ug/L	37 ug/L
June-01	140 ug/L	840 ug/L

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW6

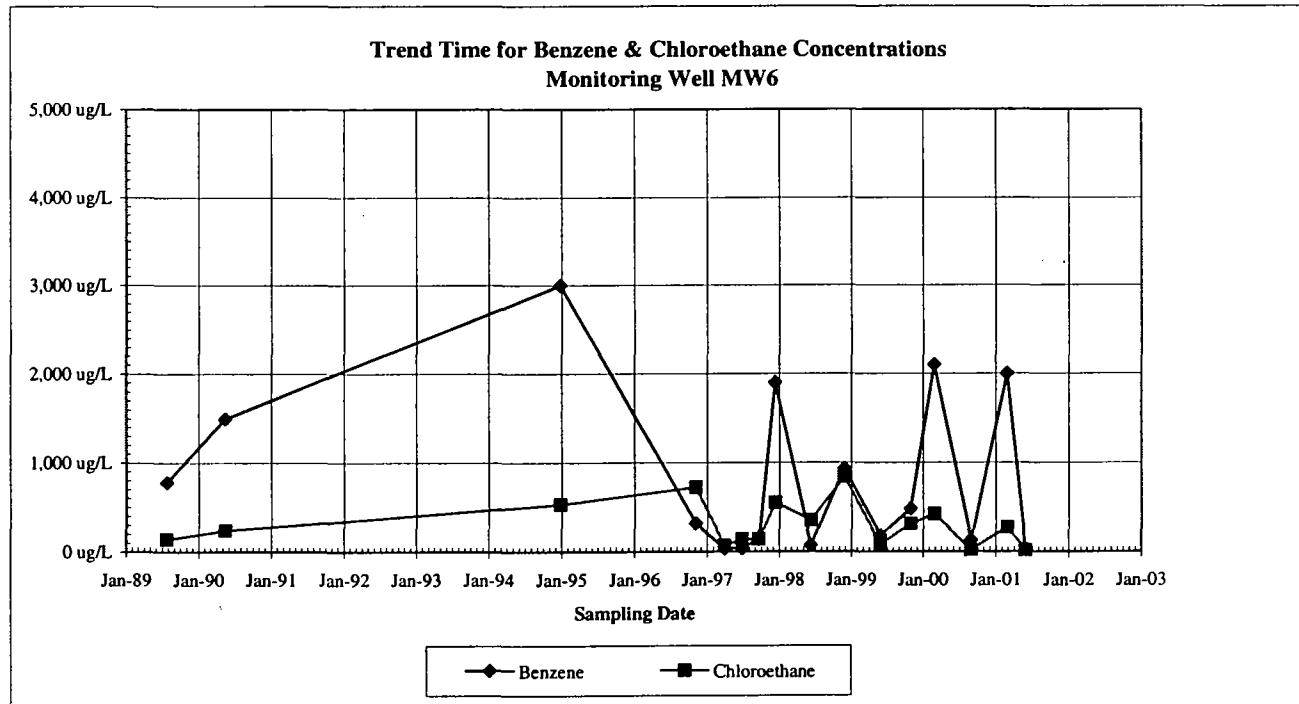
Baseline Groundwater Monitoring

ACS NPL Site

MW6

Date	Benzene	Chloroethane
BASELINE	320	720
August-89	780 ug/L	140 ug/L
May-90	1,500 ug/L	240 ug/L
December-94	3,000 ug/L	530 ug/L
November-96	320 ug/L	720 ug/L
April-97	35 ug/L	67 ug/L
July-97	39 ug/L	140 ug/L
September-97	140 ug/L	140 ug/L
December-97	1,900 ug/L	550 ug/L
June-98	72 ug/L	350 ug/L
December-98	930 ug/L	840 ug/L
June-99	180 ug/L	78 ug/L
November-99	480 ug/L	310 ug/L
March-00	2,100 ug/L	420 ug/L
September-00	130 ug/L	22 ug/L
March-01	2,000 ug/L	270 ug/L
June-01	26 ug/L	18 ug/L

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW11

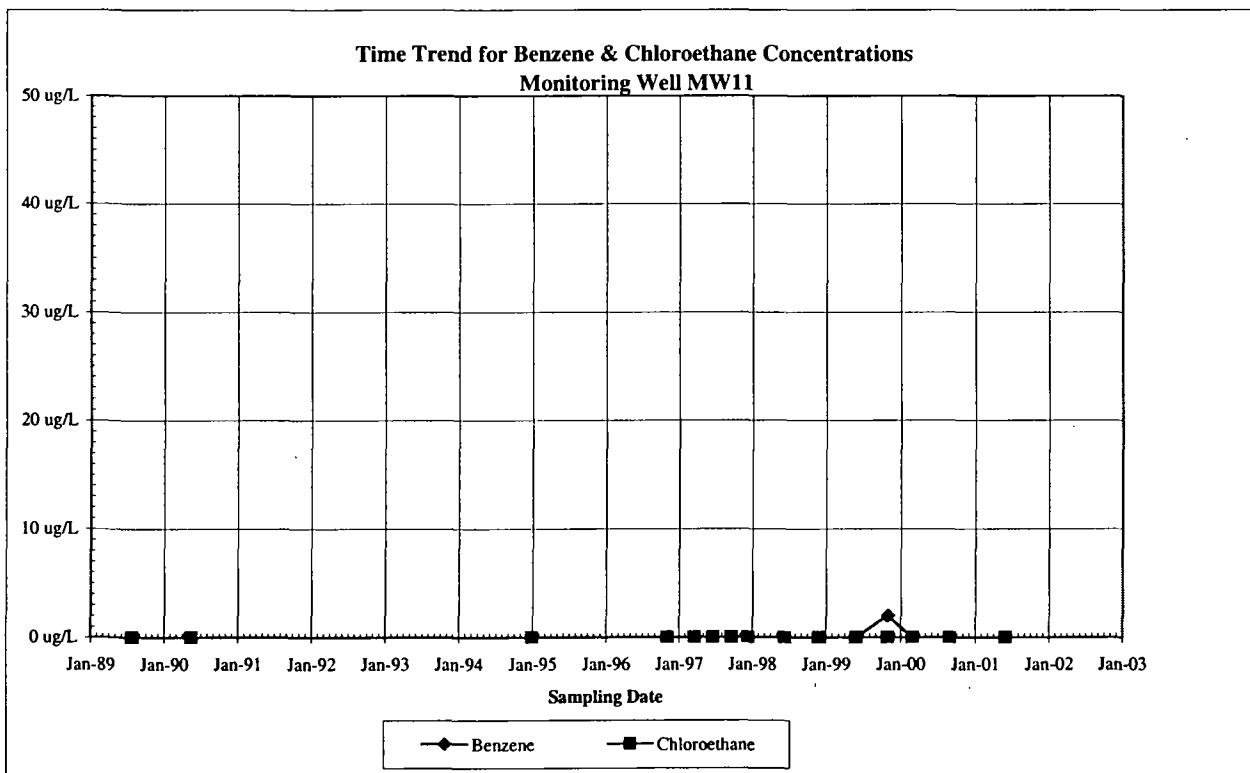
Baseline Groundwater Monitoring

ACS NPL Site

MW11

Date	Benzene	Chloroethane
Baseline	10	10
August-89	BDL	BDL
May-90	BDL	BDL
January-95	BDL	BDL
November-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	2 ug/L	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW12

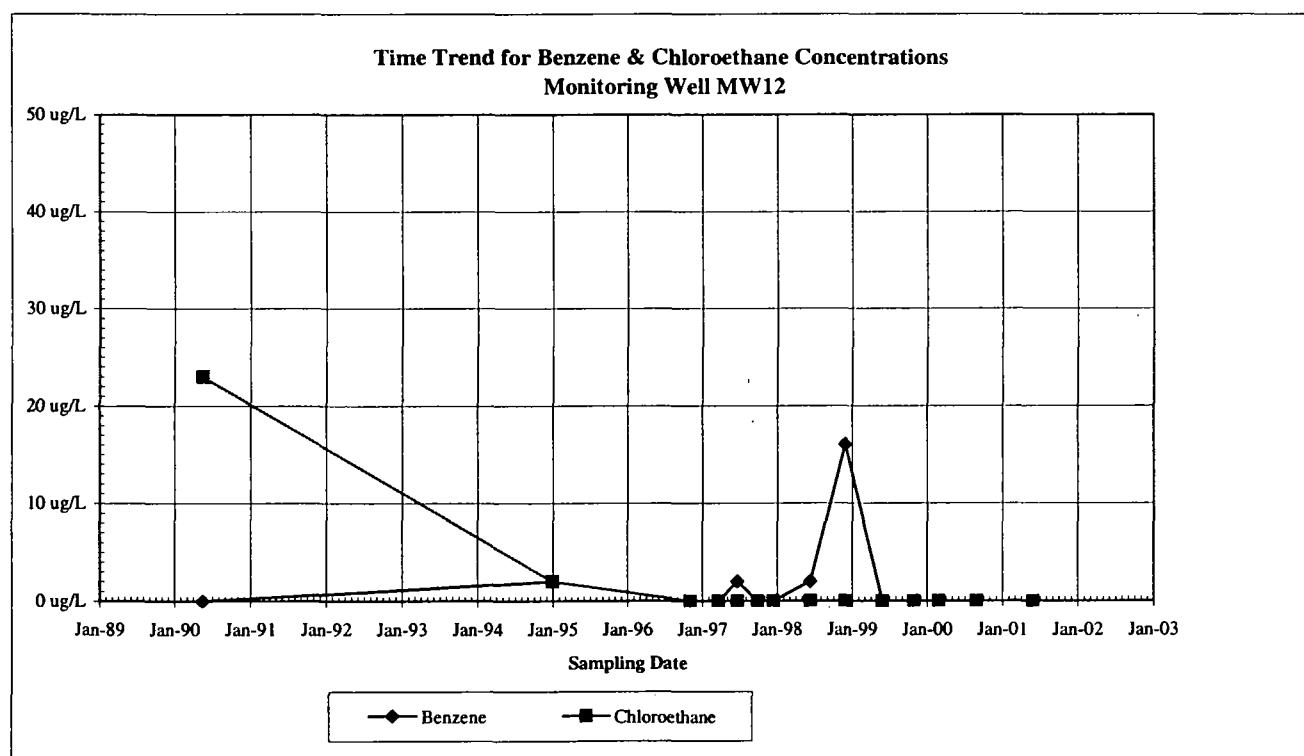
Baseline Groundwater Monitoring

ACS NPL Site

MW12

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90	BDL	23 ug/L
January-95	2 ug/L	2 ug/L
November-96	BDL	BDL
March-97	BDL	BDL
June-97	2 ug/L	BDL
October-97	BDL	BDL
December-97	BDL	BDL
June-98	2 ug/L	BDL
December-98	16 ug/L	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW13

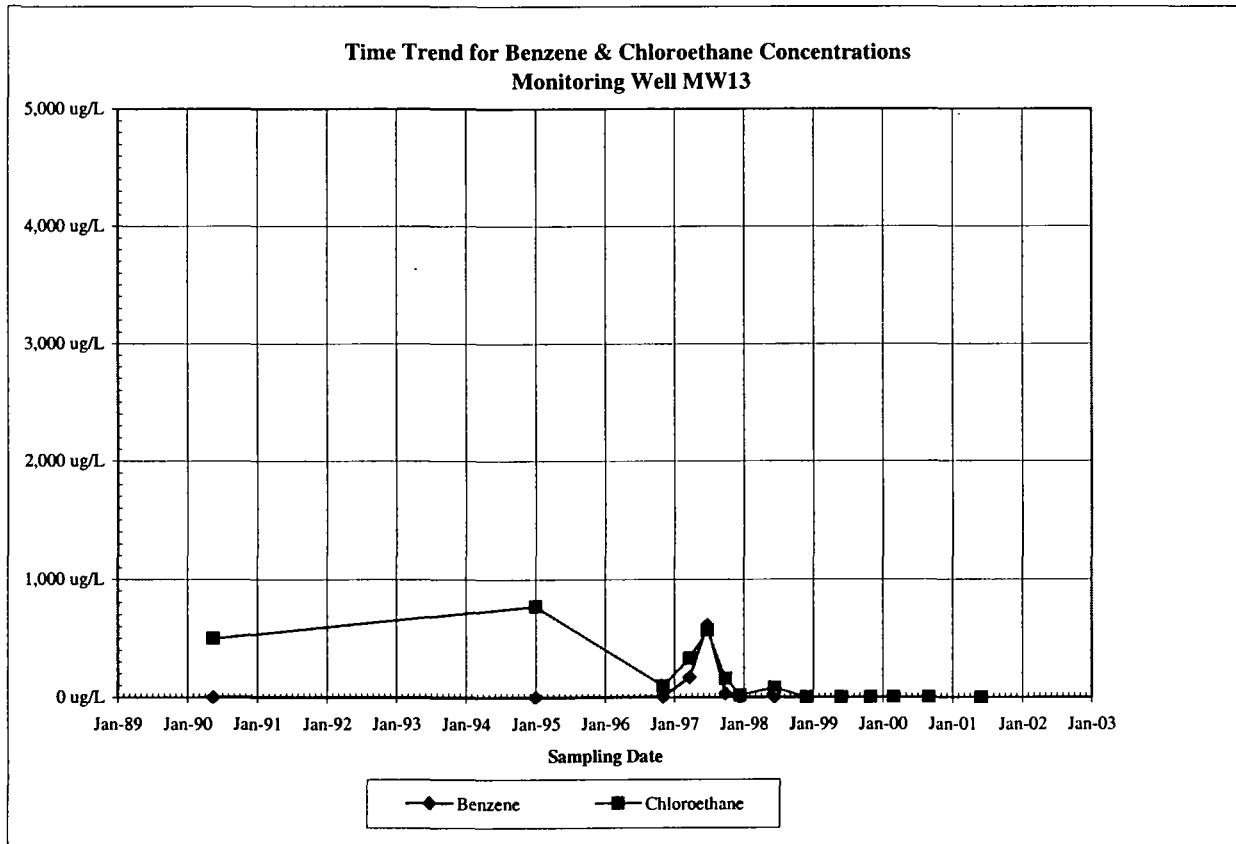
Baseline Groundwater Monitoring

ACS NPL Site

MW13

Date	Benzene	Chloroethane
Baseline	610	570
August-89		
May-90	2 ug/L	500 ug/L
January-95	BDL	770 ug/L
November-96	6 ug/L	97 ug/L
March-97	170 ug/L	330 ug/L
June-97	610 ug/L	570 ug/L
October-97	33 ug/L	160 ug/L
December-97	BDL	20 ug/L
June-98	2 ug/L	82 ug/L
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW14

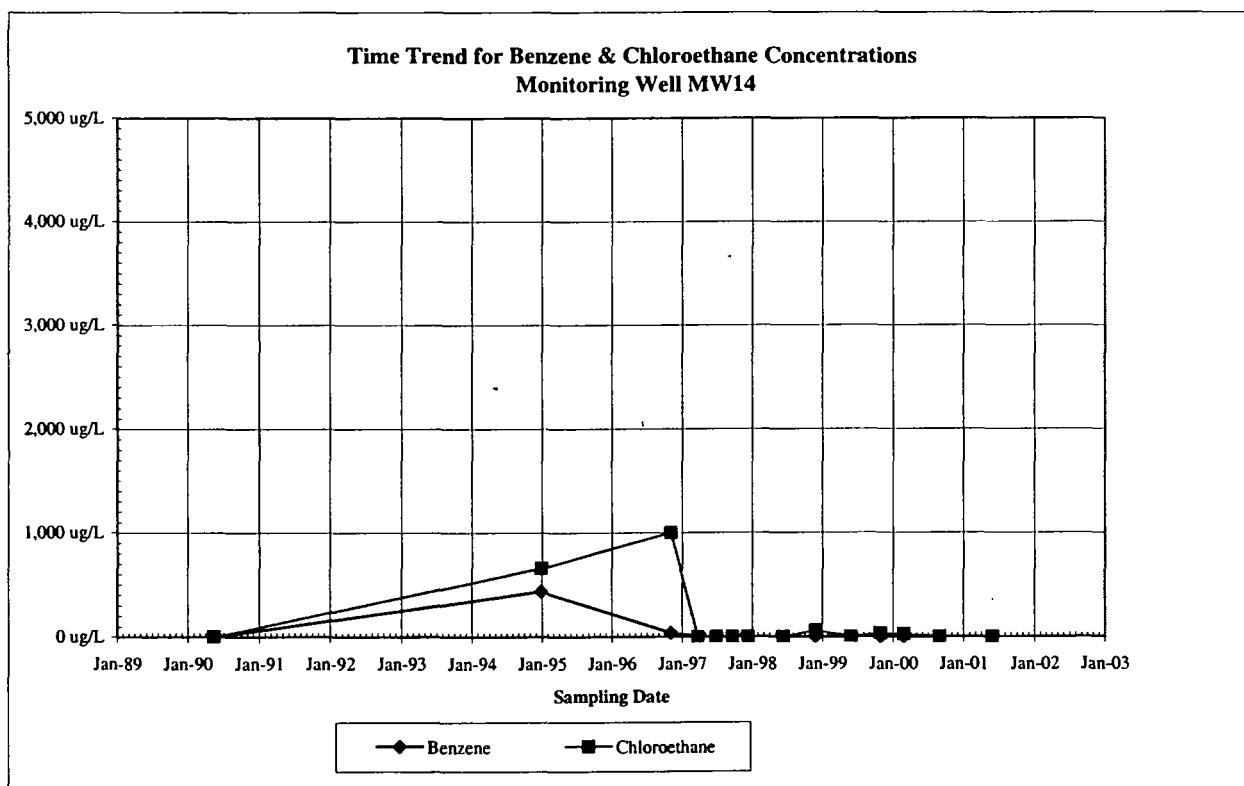
Baseline Groundwater Monitoring

ACS NPL Site

MW14

Date	Benzene	Chloroethane
Baseline	41	1000
August-89		
May-90	2 ug/L	3 ug/L
January-95	440 ug/L	660 ug/L
November-96	41 ug/L	1,000 ug/L
March-97	BDL	BDL
June-97	1 ug/L	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	59 ug/L
June-99	BDL	BDL
November-99	2 ug/L	32 ug/L
March-00	2 ug/L	26 ug/L
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW15

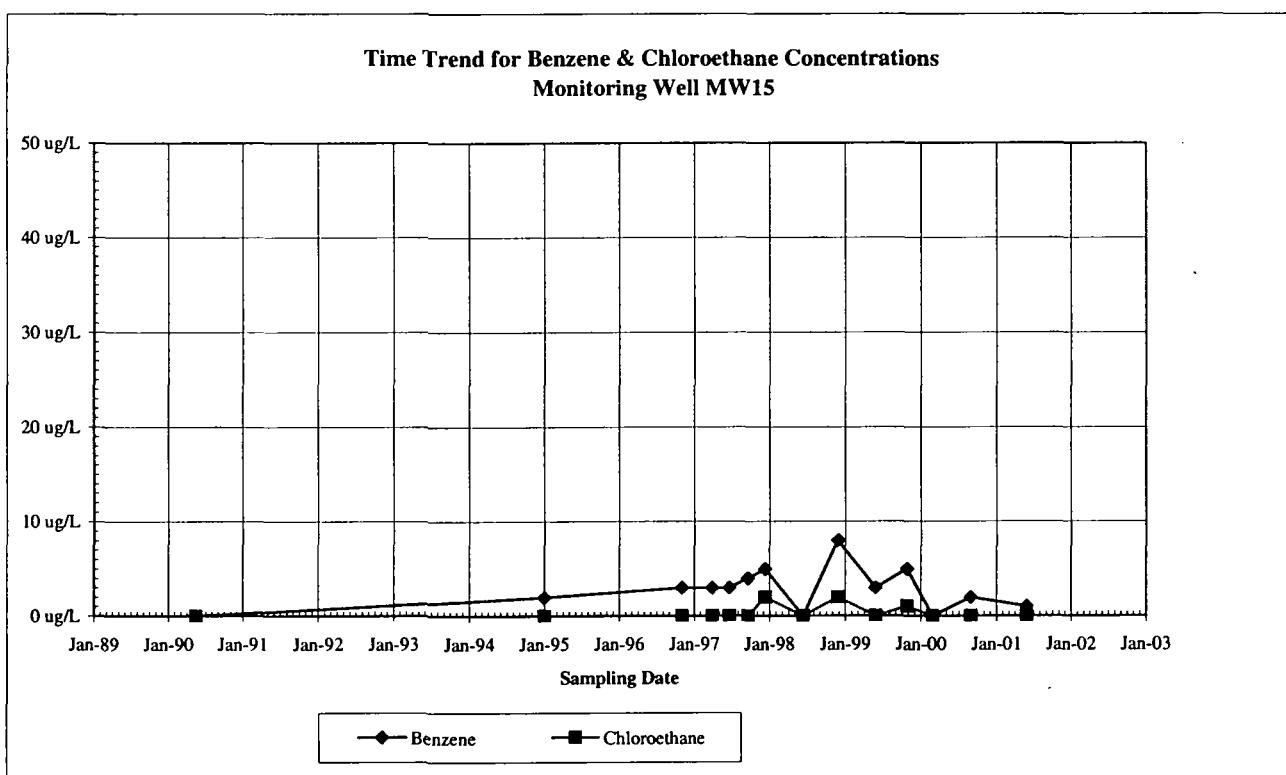
Baseline Groundwater Monitoring

ACS NPL Site

MW15

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90	BDL	BDL
January-95	2 ug/L	BDL
November-96	3 ug/L	BDL
April-97	3 ug/L	BDL
June-97	3 ug/L	BDL
September-97	4 ug/L	BDL
December-97	5 ug/L	2 ug/L
June-98	BDL	BDL
December-98	8 ug/L	2 ug/L
June-99	3 ug/L	BDL
November-99	5 ug/L	1 ug/L
March-00	BDL	BDL
September-00	2 ug/L	BDL
June-01	1 ug/L	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW17

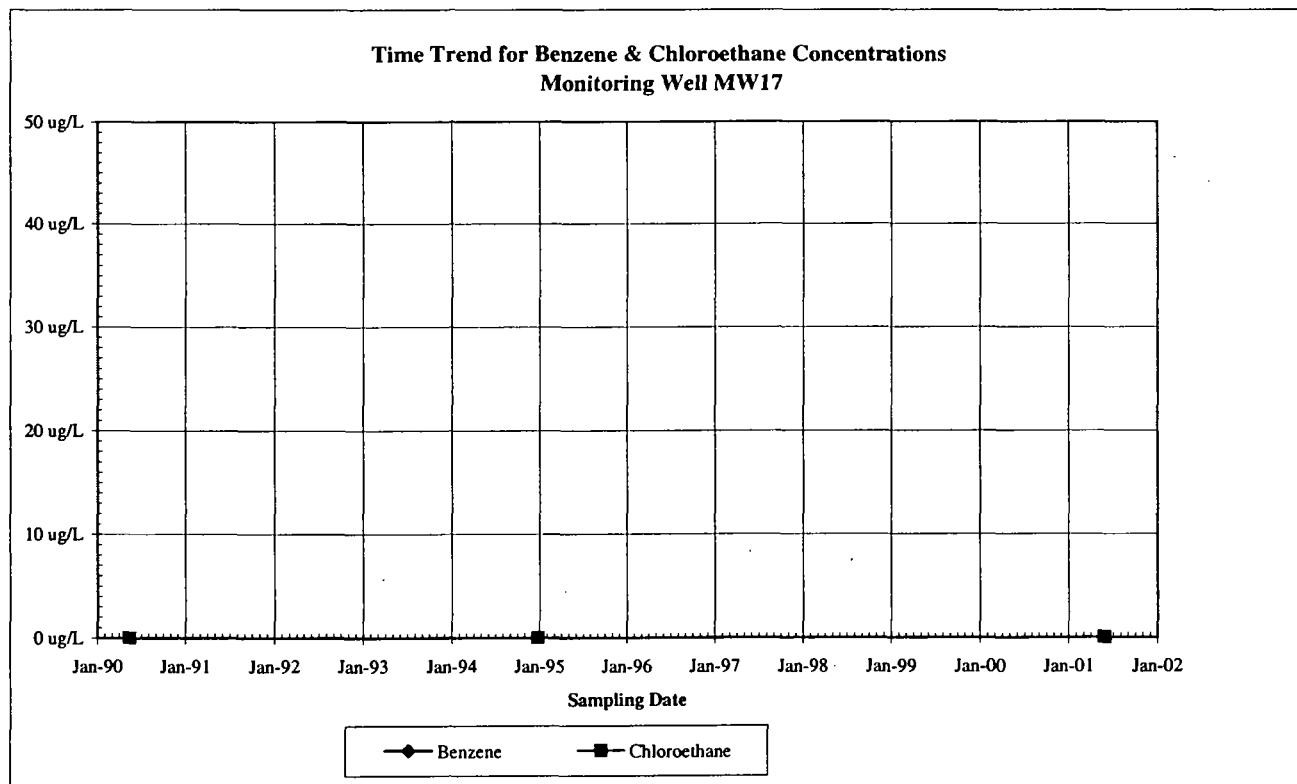
Baseline Groundwater Monitoring

ACS NPL Site

MW17

BDL = Below the Detection Limit

NA = No baseline conducted on this well.



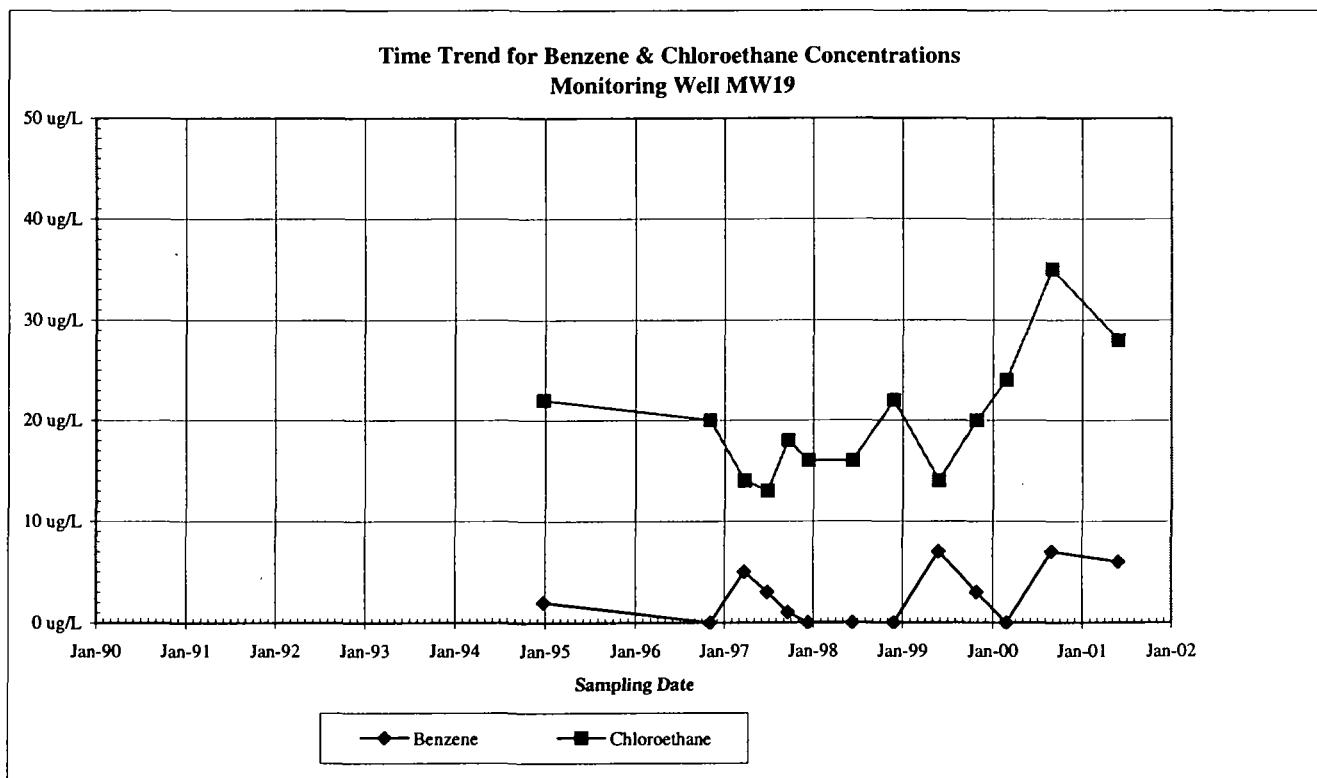
Upper Aquifer Monitoring Well: MW19

Baseline Groundwater Monitoring ACS NPL Site

MW19

<u>Date</u>	<u>Benzene</u>	<u>Chloroethane</u>
BASELINE	10	20
August-89		
May-90		
December-94	2 ug/L	22 ug/L
November-96	BDL	20 ug/L
March-97	5 ug/L	14 ug/L
June-97	3 ug/L	13 ug/L
September-97	1 ug/L	18 ug/L
December-97	BDL	16 ug/L
June-98	BDL	16 ug/L
December-98	BDL	22 ug/L
June-99	7 ug/L	14 ug/L
November-99	3 ug/L	20 ug/L
March-00	BDL	24 ug/L
September-00	7	35 ug/L
June-01	6	28 ug/L

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW37

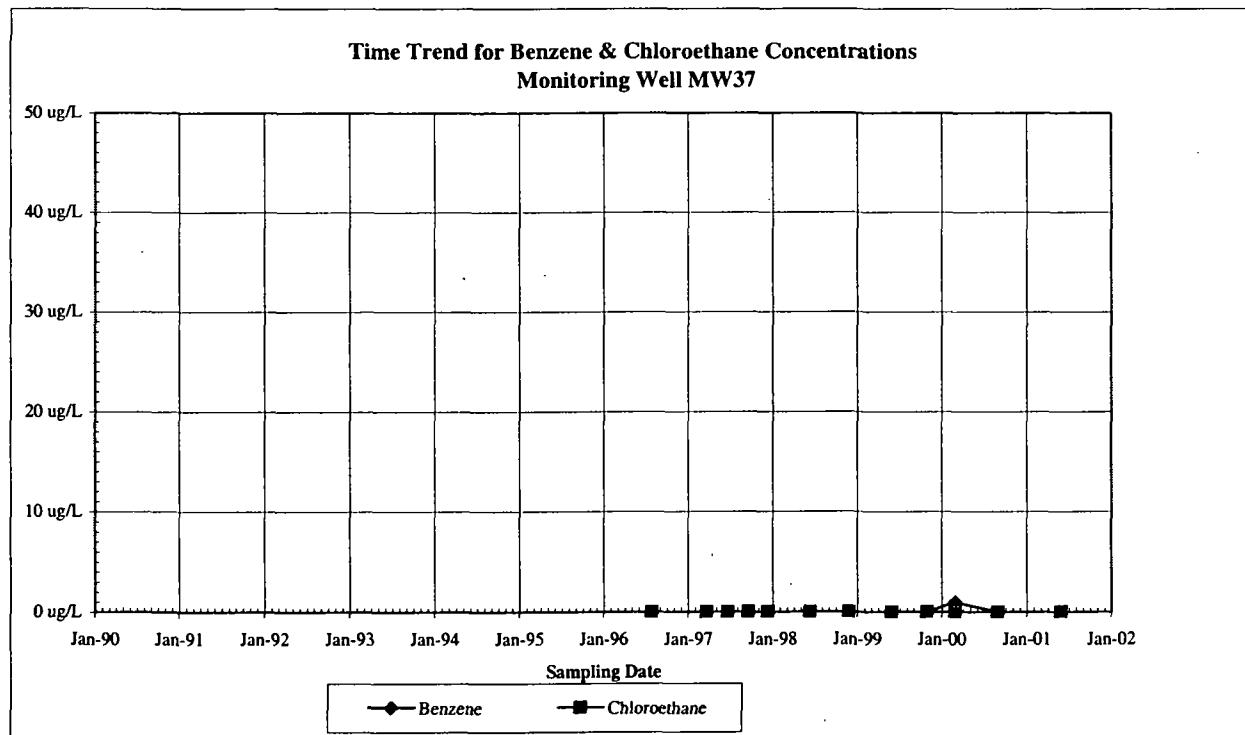
Baseline Groundwater Monitoring

ACS NPL Site

MW37

Date	Benzene	Chloroethane
Baseline	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	1 ug/L	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW38

Baseline Groundwater Monitoring

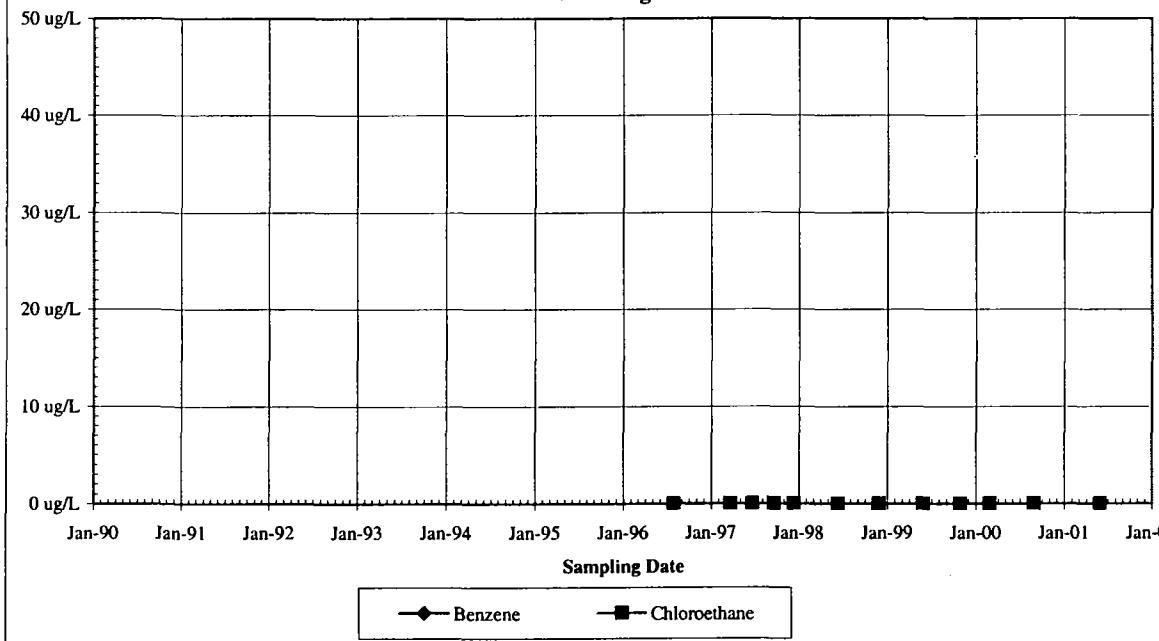
ACS NPL Site

MW38

Date	Benzene	Chloroethane
Baseline	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit

**Time Trend for Benzene & Chloroethane Concentrations
Monitoring Well MW38**



Upper Aquifer Monitoring Well: MW39

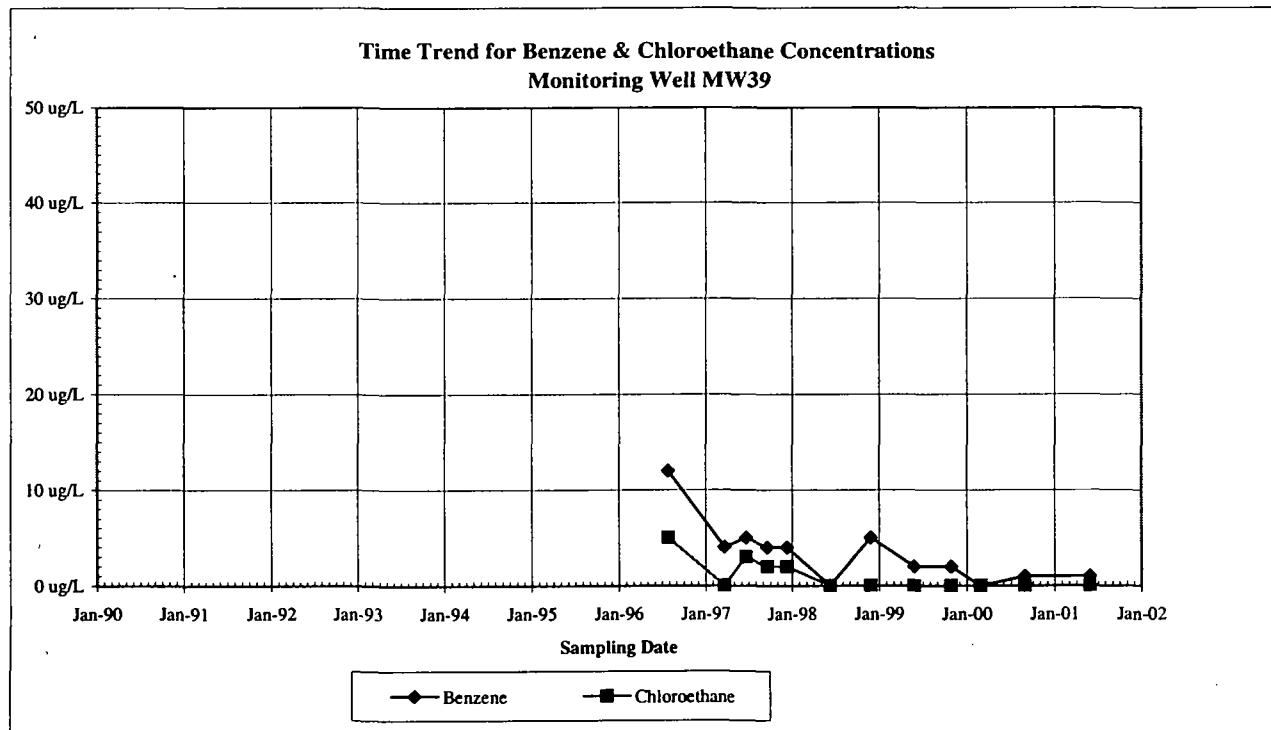
Baseline Groundwater Monitoring

ACS NPL Site

MW39

Date	Benzene	Chloroethane
Baseline	12	10
August-89		
May-90		
December-94		
August-96	12 ug/L	5 ug/L
March-97	4 ug/L	BDL
June-97	5 ug/L	3 ug/L
September-97	4 ug/L	2 ug/L
December-97	4 ug/L	2 ug/L
June-98	BDL	BDL
December-98	5 ug/L	BDL
June-99	2 ug/L	BDL
November-99	2 ug/L	BDL
March-00	BDL	BDL
September-00	1 ug/L	BDL
June-01	1 ug/L	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW40

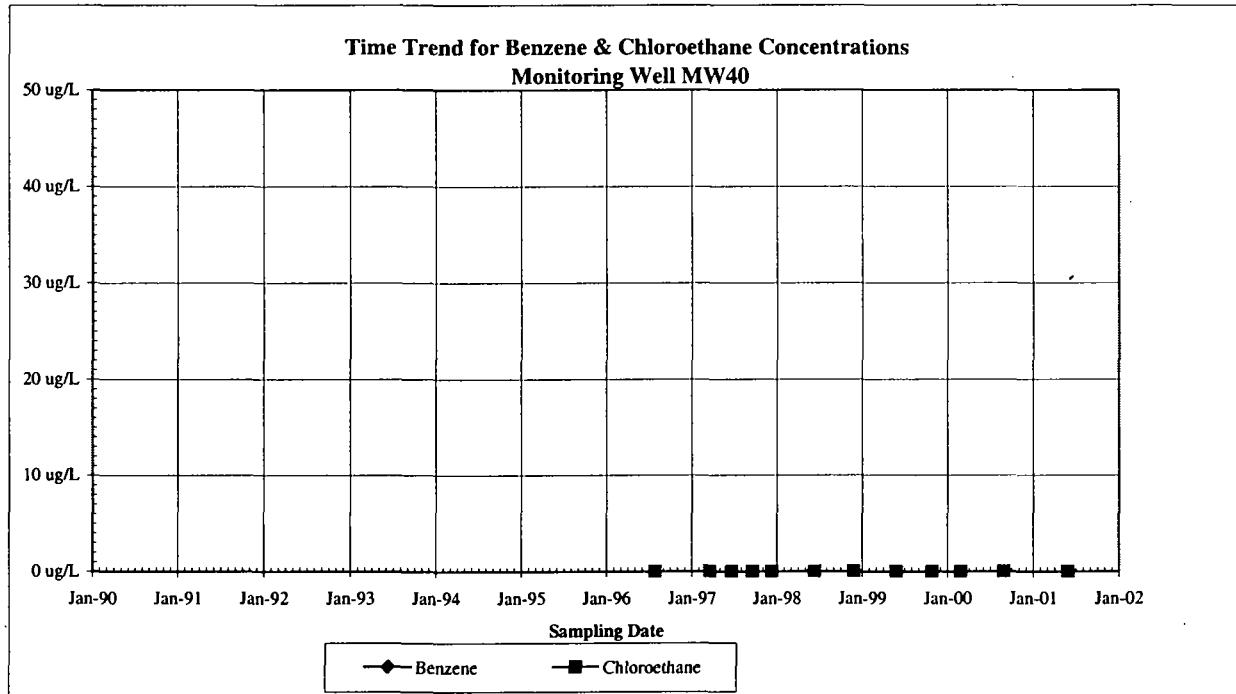
Baseline Groundwater Monitoring

ACS NPL Site

MW40

Date	Benzene	Chloroethane
Baseline	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW41

Baseline Groundwater Monitoring

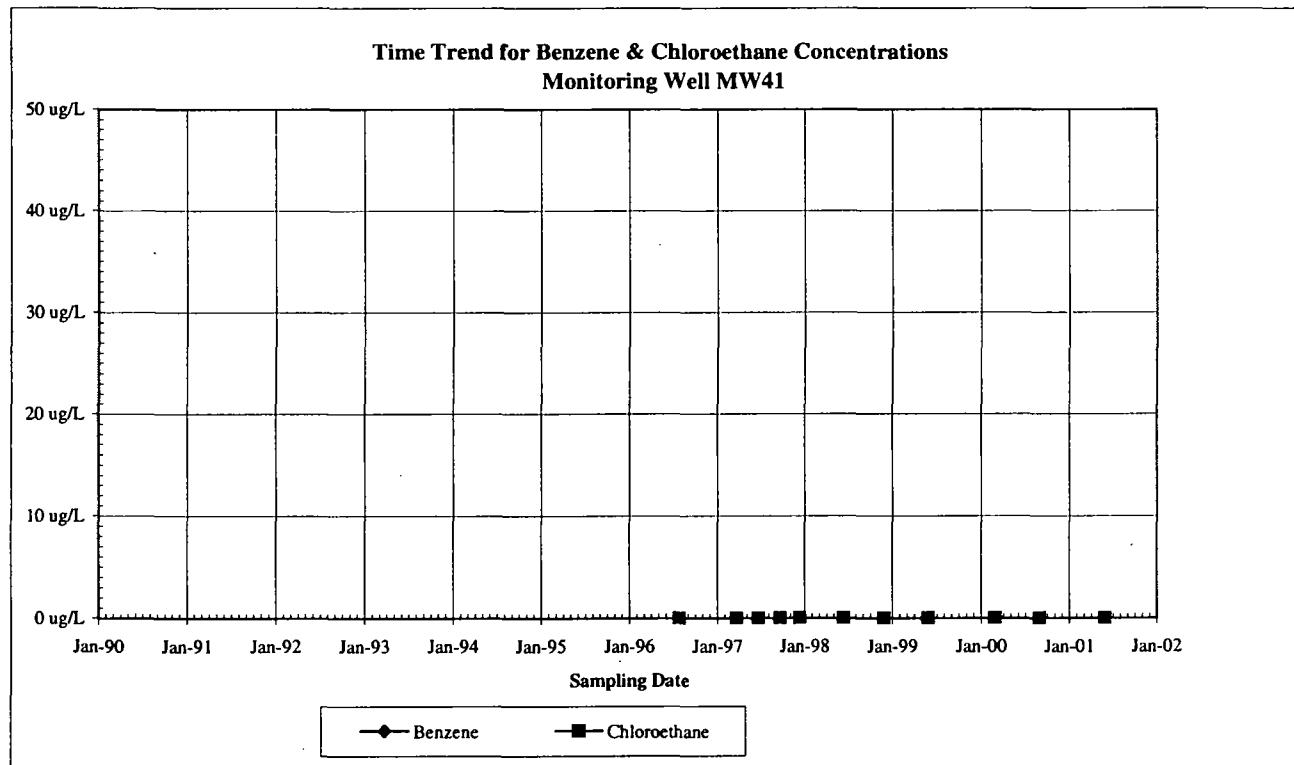
ACS NPL Site

MW41

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99		
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit

Not Sampled - Dry



Upper Aquifer Monitoring Well: MW42

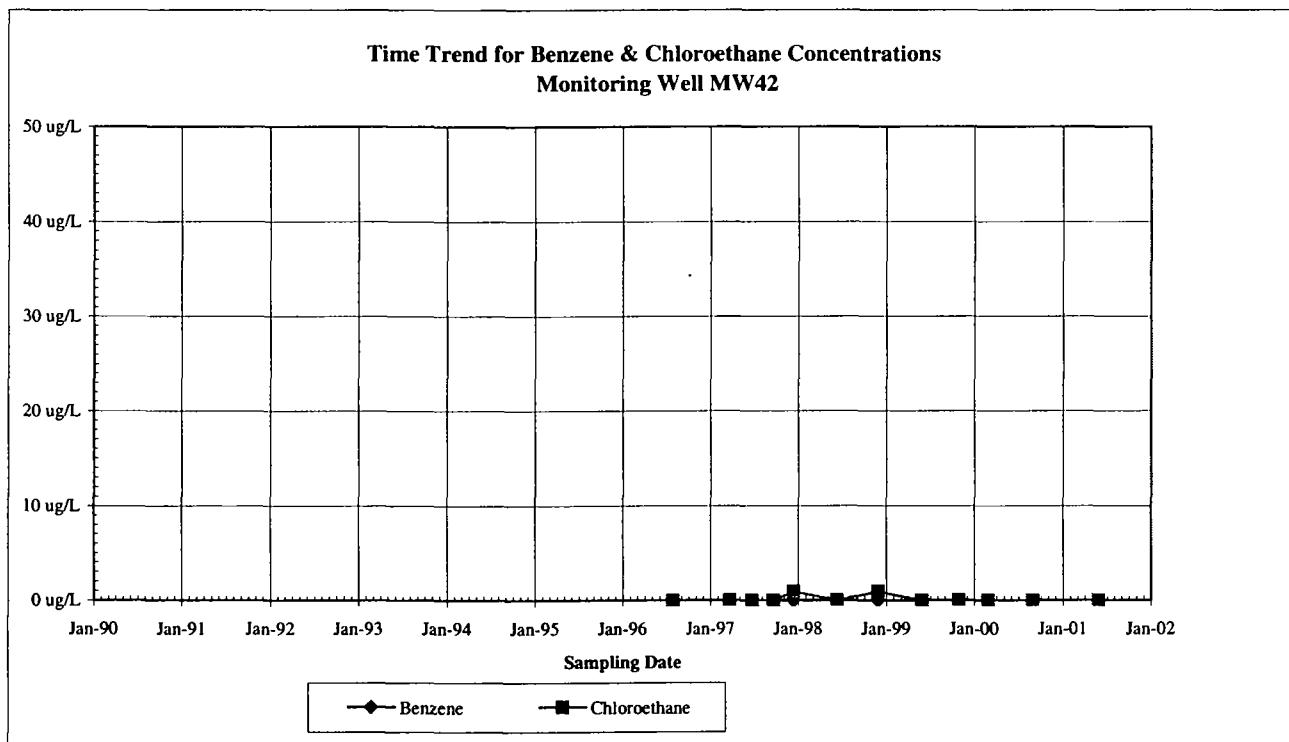
Baseline Groundwater Monitoring

ACS NPL Site

MW42

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	0.9 ug/L
June-98	BDL	BDL
December-98	BDL	0.9 ug/L
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW43

Baseline Groundwater Monitoring

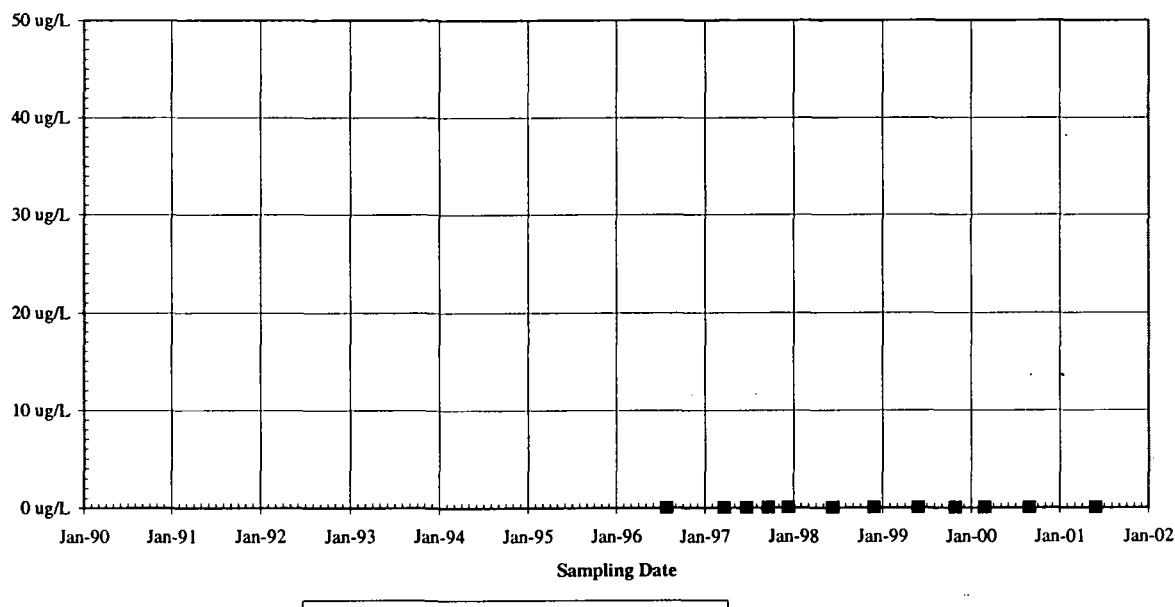
ACS NPL Site

MW43

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit

Time Trend for Benzene & Chloroethane Concentrations
Monitoring Well MW43



Upper Aquifer Monitoring Well: MW44

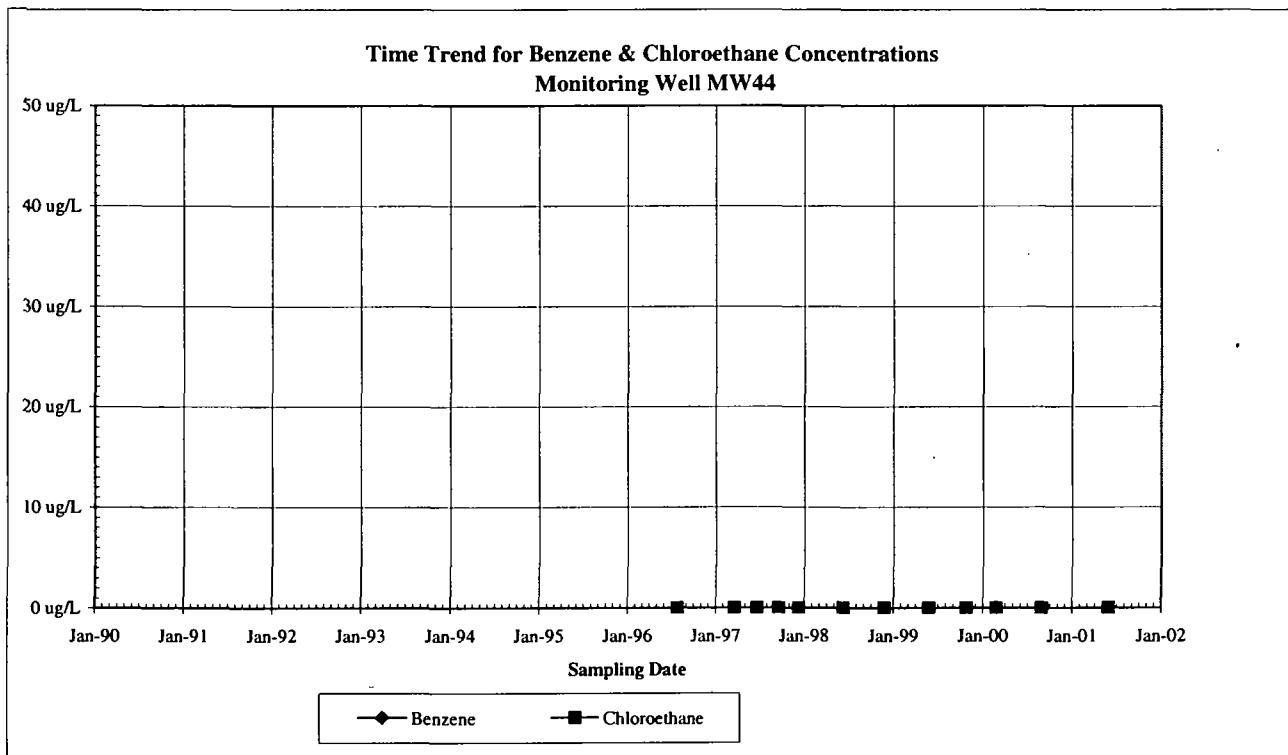
Baseline Groundwater Monitoring

ACS NPL Site

MW44

Date	Benzene	Chloroethane
BASELINE	10	10
August-89	BDL	BDL
May-90	BDL	BDL
December-94	BDL	BDL
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW45

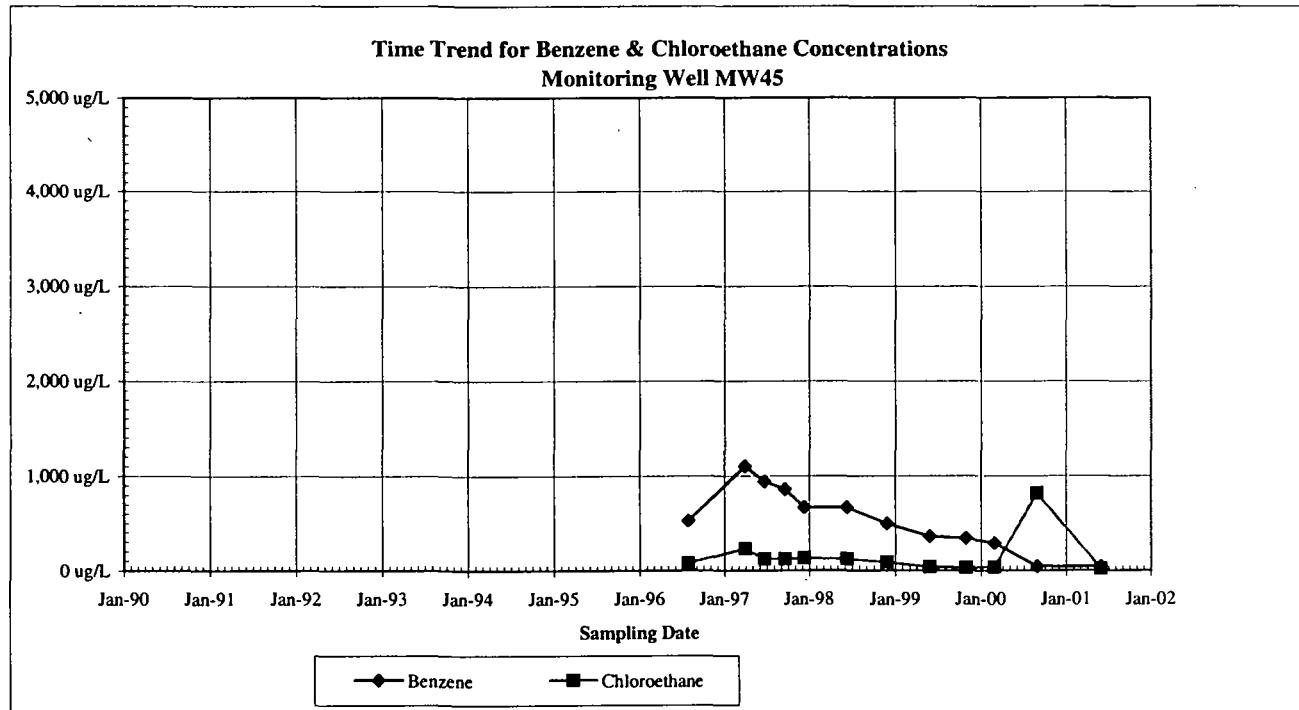
Baseline Groundwater Monitoring

ACS NPL Site

MW45

Date	Benzene	Chloroethane
BASELINE	1045	215
August-89		
May-90		
December-94		
August-96	530 ug/L	82 ug/L
April-97	1,100 ug/L	230 ug/L
June-97	940 ug/L	120 ug/L
September-97	860 ug/L	120 ug/L
December-97	670 ug/L	130 ug/L
June-98	670 ug/L	120 ug/L
December-98	500 ug/L	88 ug/L
June-99	360 ug/L	38 ug/L
November-99	340 ug/L	32 ug/L
March-00	290 ug/L	38 ug/L
September-00	43 ug/L	820 ug/L
June-01	39 ug/L	17 ug/L

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW46

Baseline Groundwater Monitoring

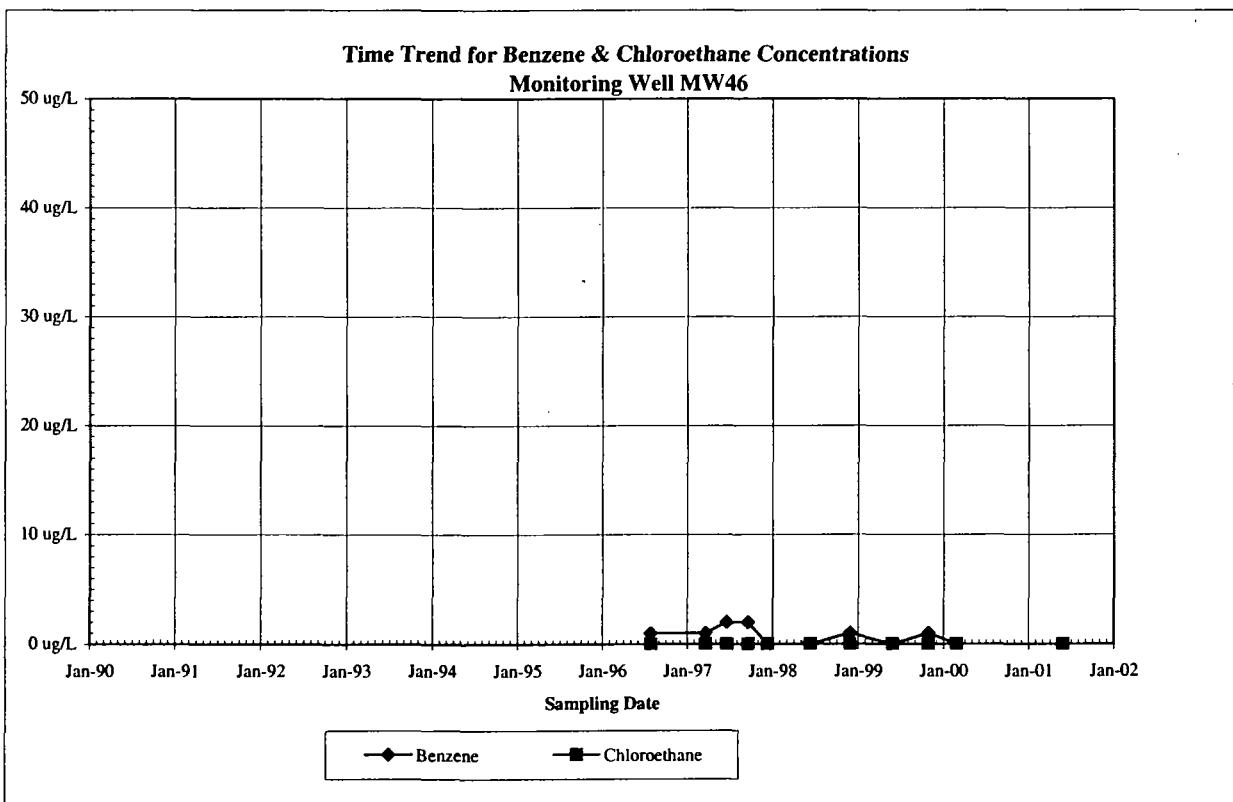
ACS NPL Site

MW46

<u>Date</u>	<u>Benzene</u>	<u>Chloroethane</u>
Baseline	10	10
August-89		
May-90		
December-94		
August-96	1 ug/L	BDL
March-97	1 ug/L	BDL
June-97	2 ug/L	BDL
September-97	2 ug/L	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	1 ug/L	BDL
June-99	BDL	BDL
November-99	1 ug/L	BDL
March-00	BDL	BDL
September-00		
June-01	BDL	BDL

Not sampled - could not be found

BDL = Below the Detection Limit



Upper Aquifer Monitoring Well: MW47

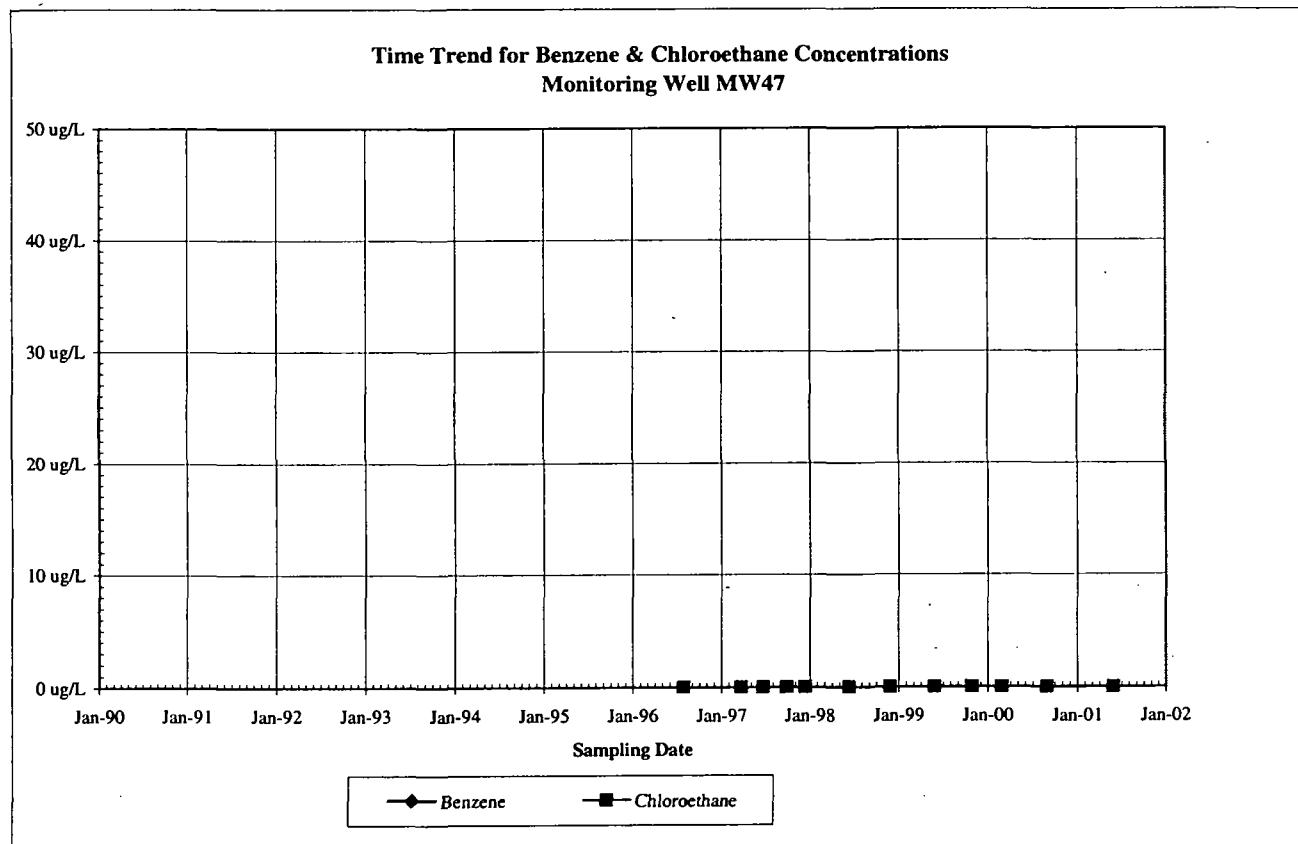
Baseline Groundwater Monitoring

ACS NPL Site

MW47

Date	Benzene	Chloroethane
BASELINE	10	10
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
October-97	BDL	BDL
December-97	BDL	BDL
June-98	BDL	BDL
December-98	BDL	BDL
June-99	BDL	BDL
November-99	BDL	BDL
March-00	BDL	BDL
September-00	BDL	BDL
June-01	BDL	BDL

BDL = Below the Detection Limit



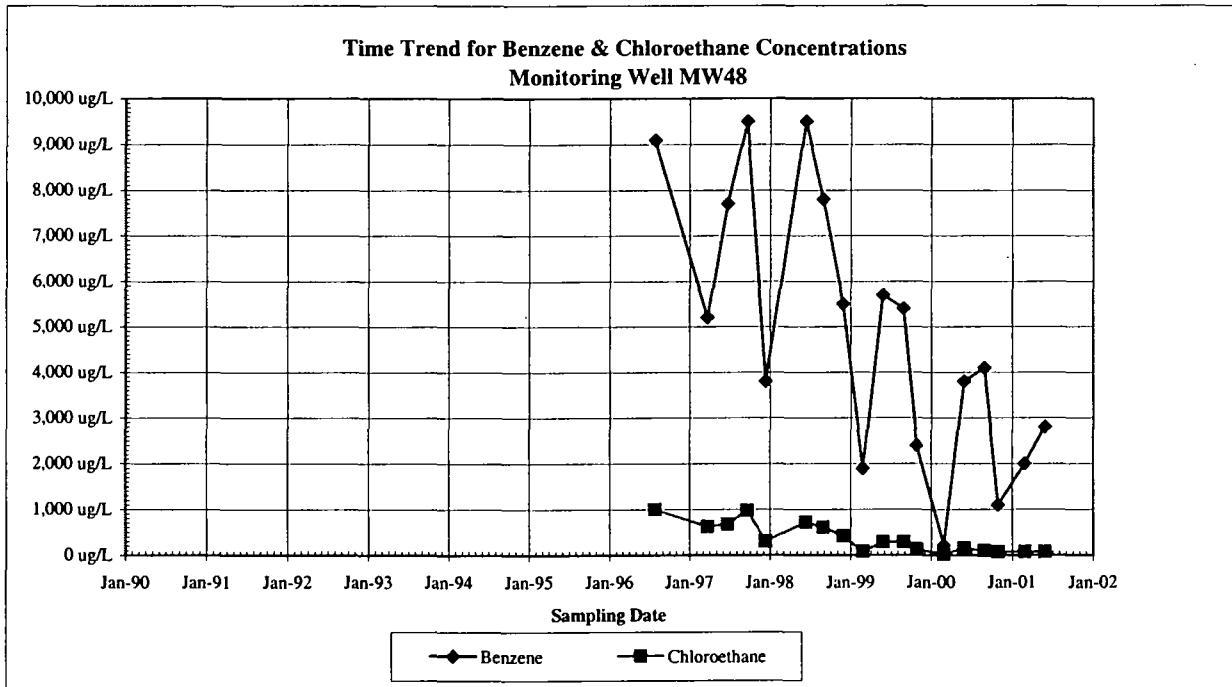
Upper Aquifer Monitoring Well: MW48

Baseline Groundwater Monitoring

ACS NPL Site

MW48

Date	Benzene	Chloroethane
Baseline	9500	1000
August-89		
May-90		
December-94		
August-96	9,100 ug/L	1,000 ug/L
March-97	5,200 ug/L	620 ug/L
June-97	7,700 ug/L	670 ug/L
September-97	9,500 ug/L	980 ug/L
December-97	3,800 ug/L	300 ug/L
June-98	9,500 ug/L	720 ug/L
September-98	7,800 ug/L	610 ug/L
December-98	5,500 ug/L	420 ug/L
March-99	1,900 ug/L	83 ug/L
June-99	5,700 ug/L	290 ug/L
September-99	5,400 ug/L	290 ug/L
November-99	2,400 ug/L	140 ug/L
March-00	220 ug/L	24 ug/L
June-00	3,800 ug/L	160 ug/L
September-00	4,100 ug/L	100 ug/L
November-00	1,100 ug/L	78 ug/L
March-01	2,000 ug/L	78 ug/L
June-01	2,800 ug/L	80 ug/L



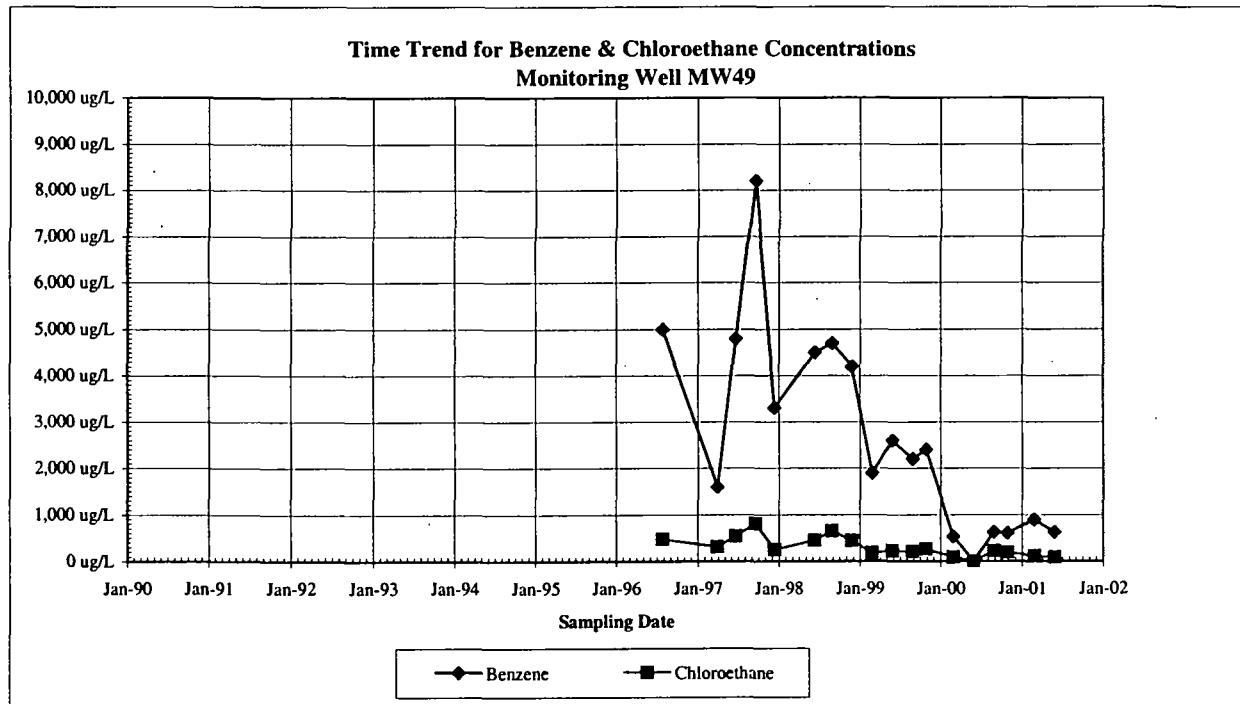
Upper Aquifer Monitoring Well: MW49

Baseline Groundwater Monitoring

ACS NPL Site

MW49

Date	Benzene	Chloroethane
Baseline	6750	715
August-89		
May-90		
December-94		
August-96	5,000 ug/L	480 ug/L
April-97	1,600 ug/L	310 ug/L
June-97	4,800 ug/L	540 ug/L
September-97	8,200 ug/L	810 ug/L
December-97	3,300 ug/L	250 ug/L
June-98	4,500 ug/L	450 ug/L
September-98	4,700 ug/L	650 ug/L
December-98	4,200 ug/L	440 ug/L
March-99	1,900 ug/L	180 ug/L
June-99	2,600 ug/L	220 ug/L
September-99	2,200 ug/L	210 ug/L
November-99	2,400 ug/L	260 ug/L
March-00	530 ug/L	91 ug/L
June-00	ND	ND
September-00	630 ug/L	220 ug/L
November-00	610 ug/L	190 ug/L
March-01	900 ug/L	120 ug/L
June-01	630 ug/L	91 ug/L



Lower Aquifer Monitoring Well: MW09/MW9R

Baseline Groundwater Monitoring

ACS NPL Site

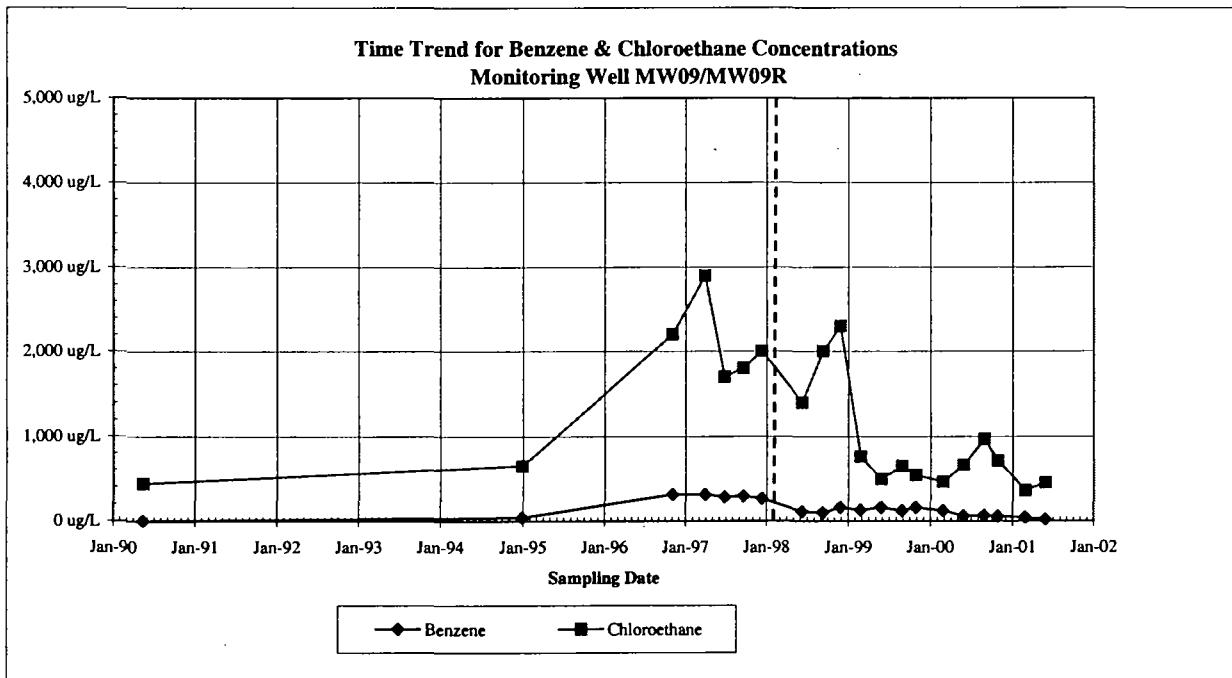
MW09/MW09R

Date	Benzene	Chloroethane
BASELINE	310	2900
August-89		
May-90	BDL	440 ug/L
January-95	40 ug/L	650 ug/L
November-96	310 ug/L	2,200 ug/L
April-97	310 ug/L	2,900 ug/L
June-97	280 ug/L	1,700 ug/L
September-97	290 ug/L	1,800 ug/L
December-97	260 ug/L	2,000 ug/L
June-98	110 ug/L	1,400 ug/L
September-98	100 ug/L	2,000 ug/L
December-98	160 ug/L	2,300 ug/L
March-99	130 ug/L	760 ug/L
June-99	160 ug/L	490 ug/L
September-99	120 ug/L	650 ug/L
November-99	160 ug/L	540 ug/L
March-00	120 ug/L	460 ug/L
June-00	60 ug/L	660 ug/L
September-00	65 ug/L	970 ug/L
November-00	55 ug/L	710 ug/L
March-01	41 ug/L	360 ug/L
June-01	19 ug/L	450 ug/L

MW09

MW09R

BDL = Below the Detection Limit



Lower Aquifer Monitoring Well: MW10C

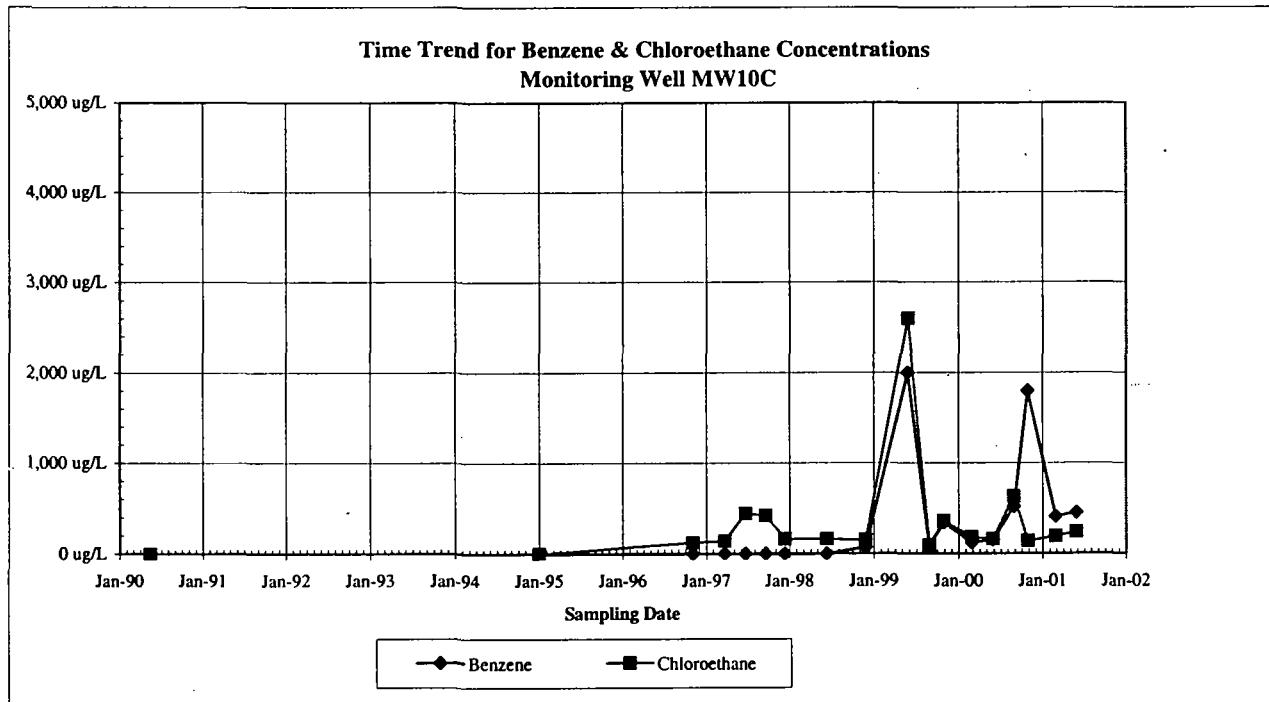
Baseline Groundwater Monitoring

ACS NPL Site

MW10C

Date	Benzene	Chloroethane
BASELINE	150	420
August-89		
May-90	BDL	BDL
January-95	BDL	BDL
November-96	BDL	120 ug/L
March-97	BDL	140 ug/L
June-97	BDL	440 ug/L
September-97	BDL	420 ug/L
December-97	BDL	160 ug/L
June-98	BDL	160 ug/L
December-98	66 ug/L	150 ug/L
June-99	2,000 ug/L	2,600 ug/L
September-99	83 ug/L	88 ug/L
November-99	340 ug/L	360 ug/L
March-00	120 ug/L	180 ug/L
June-00	150 ug/L	160 ug/L
September-00	520 ug/L	630 ug/L
November-00	1,800 ug/L	140 ug/L
March-01	410 ug/L	190 ug/L
June-01	450 ug/L	240 ug/L

BDL = Below the Detection Limit

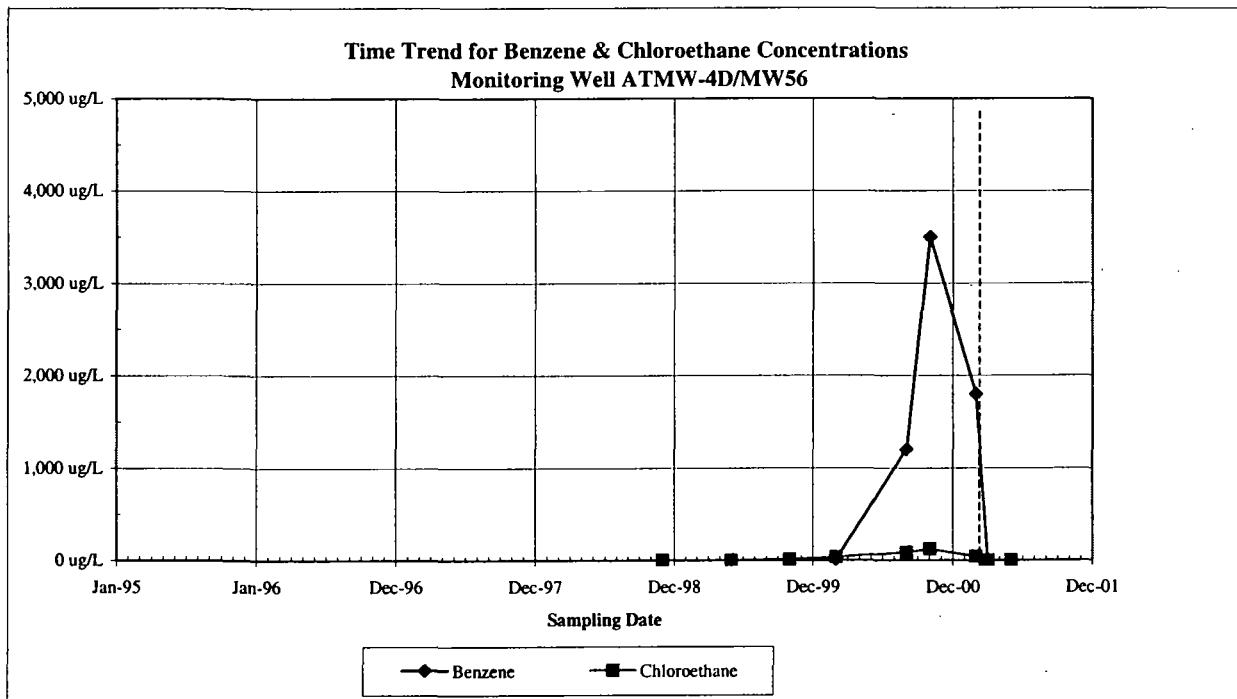


Lower Aquifer Monitoring Well: ATMW4D-MW56

Baseline Groundwater Monitoring

ACS NPL Site

ATMW-4D/MW56





APPENDIX C

VALIDATION NARRATIVE AND LABORATORY REPORTS FROM UPPER AQUIFER MONITORING WELLS AND QUALITY CONTROL SAMPLES

M E M O R A N D U M



To: Chad Smith
From: Matthew Reeder, MW-SLC
Subject: Data Validation for American
Chemical Service (ACS).
Griffith, Indiana.

Date: July 23, 2001
Job No.: 2090603.030401
SDG: G1201, H1201, I1201

INTRODUCTION

The following text is based on the validation of water samples collected at American Chemical Service, Inc. in June 2001.

Forty-four water samples and twelve QA/QC samples were analyzed by CompuChem Laboratories, Cary, North Carolina for the following parameters:

SDG G1201 VOA, CLP-OLM 3.1, (samples: GWMW07, GWMW10C, GWMW11, GWMW12, GWMW13, GWMW17, GWMW23, GWMW24, GWMW28, GWMW37, GWMW38, GWMW39, GWMW40, GWMW46, GWMW47, GWMW50, GWMW52, GWMW53, GWMW56)

SDG G1201 Arsenic and Lead, CLP-ILM 4.1, (samples: GWMW07, GWMW10C, GWMW11, GWMW12, GWMW13, GWMW17, GWMW23, GWMW24, GWMW28, GWMW37, GWMW38, GWMW39, GWMW40, GWMW46, GWMW47, GWMW50, GWMW52, GWMW53, GWMW56)

SDG H1201 VOA, CLP-OLM 3.1, (samples: GWM1S, GWM4D, GWM4S, GWMW06, GWMW19, GWMW30, GWMW33, GWMW49, GWMW51)

SDG H1201 Arsenic and Lead, CLP-ILM 4.1, (samples: GWM1S, GWM4D, GWM4S, GWMW06, GWMW19, GWMW30, GWMW33, GWMW49, GWMW51)

SDG I1201 VOA, CLP-OLM 3.1, (samples: GWMW08, GWMW14, GWMW15, GWMW29, GWMW31, GWMW32, GWMW34, GWMW41, GWMW42, GWMW43, GWMW44, GWMW45, GWMW48, GWMW54R, GWMW55, GWMW9R)

SDG I1201 Arsenic and Lead, CLP-ILM 4.1, (samples: GWMW08, GWMW14, GWMW15, GWMW29, GWMW31, GWMW32, GWMW34, GWMW41, GWMW42, GWMW43, GWMW44, GWMW45, GWMW48, GWMW54R, GWMW55, GWMW9R)

Data validation was conducted in accordance with procedures specified in *Pre-Design Activities Quality Assurance Project Plan (GWMW, 1995)*, *USEPA Contract Laboratory Program Statement of Work for Organic Analysis OLM03.1*(U.S. EPA August 1994), *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis Multi-Media Multi-Concentration ILM04.1* (U.S. EPA February 2000); and was also based on principles outlined in *National Functional Guidelines for Organic Data Review (USEPA, 1994a)*, and *National Functional Guidelines for Inorganic Data Review (USEPA, 1994b)*.

The following field quality control samples were collected during the June 2001 sampling round:

- Five field duplicates (GWMW9R-97, GWMW06-97, GWMW30-97, GWMW49-97, GWMW56-97)
- Five field blanks (GWFB01, GWFB02, GWFB03, GWFB04, GWFB05)
- Two trip blanks (GWTB01, GWTB02)

This memorandum contains a narrative summarizing the data quality objectives specified in the work plan.

SUMMARY

This section describes the quality control parameters reviewed during validation, summarizes the data quality objectives as a result of the validation and provides a summary of the deficiencies and qualification applied. The following paragraphs describe deficiencies that were identified which resulted in qualification of the sample results. Each analysis is separated into sections for clarity.

Volatile Organic Compounds

Major Deficiencies: There were no major deficiencies identified during the validation process.

Minor Deficiencies: Sample GWM4S-17 had a high surrogate recovery, and a low matrix spike recovery for benzene. Samples are not qualified based on surrogate recovery unless two or more are outside the control limits. However, benzene for this sample should be flagged '140 J' for 'estimated' because of the low matrix spike recovery.

Sample GWMW28-17 had a high matrix spike duplicate recovery for chlorobenzene. The sample will not be qualified because there were no hits of chlorobenzene in the sample.

Metals (As and Pb)

Major Deficiencies: There were no major deficiencies identified during the validation process.

Minor Deficiencies: There were no minor deficiencies identified during the validation process.

DATA QUALITY OBJECTIVES

The following is a summary of the data quality objectives that were evaluated during the data validation process.

Reporting Limits: Reporting limits were met for all analyses with the following exception.

- For VOCs: Reporting limits were met with the exception of necessary dilutions. Both the original and diluted sample results were included.
- For Metals: Reporting limits were met without exception.

Accuracy

Laboratory Control Sample: Validation of the LCS was performed for inorganic analyses. The LCS for the inorganic analyses were within control limits and analyzed at the correct frequency. An LCS is not required for the VOC analyses in accordance with USEPA CLP SOW method OLM03.1.

Surrogates: The surrogate results were within laboratory specified limits with exception of sample GWM4S-17, discussed above.

Matrix Spike / Matrix Spike Duplicate: The MS/MSD results were within laboratory specified limits with exception of sample GWM4S-17, discussed above.

Precision

Field Duplicates: The relative percent difference (RPD) was calculated for those analytes that were detected above the reporting limit in both the field and field replicate samples. The RPD's were within an acceptable range.

Laboratory Duplicate Sample: The laboratory duplicate results were within laboratory specified limits without exception.

The overall results were acceptable, indicating that sampling and analytical precision objectives were met for the sampling event.

Completeness

The data package was complete for the requested analyses. No results were considered unusable. The completeness was 100 percent, which meets the completeness objective of 95 percent.

Representativeness:

No analytes were detected in the trip blanks. No samples were qualified based on trip blank data.

Field Blank GWFB03 had a hit of Lead at 1.7 $\mu\text{g/l}$. This detection has no effect on the samples because Lead was not detected in the samples collected before and after GWFB03.

No analytes were detected in the method blanks. No samples were qualified based on method blank data.

Comparability:

All data were reported in similar units to facilitate comparison of results within the data packages. Samples arrived at the laboratory within the limits of 2-6°C. All holding times were met with the exception of the dilution run of sample GWMW9R-97. Chloroethane for this sample should be flagged '500 J' for 'estimated.'

CONCLUSION

As a result of this evaluation, all data within this SDG are of known and acceptable quality in relation to the DQOs of this project. Data are considered usable as qualified for the intended purposes.

REFERENCES

Pre-Design Activities Quality Assurance Project Plan, American Chemical Service, Inc. NPL Site, Griffith Indiana (GWMW, 1995).

USEPA Contract Laboratory Program Statement of Work for Organic Analysis OLM03.1 (U.S. EPA August 1994).

USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis Multi-Media Multi-Concentration ILM04.1 (U.S. EPA February 2000).

National Functional Guidelines for Organic Data Review (U.S. EPA, 1994a).

National Functional Guidelines for Inorganic Data Review (U.S. EPA, 1994b).

ACS June 2001
 Field Duplicate Comparisons
 SDG's G1201, H1201, I1201

Parameter	Sample Result	Duplicate Result	RPD	Comments
SDG G1201	GWMW56	GWMW56-97		
Vinyl Chloride	ND	ND	0.0%	
chloroethane	ND	ND	0.0%	
1,1-Dichloroethene	ND	ND	0.0%	
trans-1,2-Dichloroethene	ND	ND	0.0%	
cis-1,2-Dichloroethene	ND	ND	0.0%	
1,1,1-Trichloroethane	ND	ND	0.0%	
Benzene	ND	ND	0.0%	
Trichloroethene	ND	ND	0.0%	
1,1,2-Trichloroethane	ND	ND	0.0%	
Tetrachloroethene	ND	ND	0.0%	
Arsenic	ND	ND	0.0%	
Lead	0.93	1.7	58.6%	
SDG I1201, H1201	GWMW9R	GWMW9R-97		
Vinyl Chloride	ND	ND	0.0%	
chloroethane	450	500 J	10.5%	
1,1-Dichloroethene	ND	ND	0.0%	
trans-1,2-Dichloroethene	ND	ND	0.0%	
cis-1,2-Dichloroethene	ND	ND	0.0%	
1,1,1-Trichloroethane	ND	ND	0.0%	
Benzene	19	29	41.7%	
Trichloroethene	ND	ND	0.0%	
1,1,2-Trichloroethane	ND	ND	0.0%	
Tetrachloroethene	ND	ND	0.0%	
Arsenic	ND	ND	0.0%	
Lead	ND	1.7	0.0%	
SDG H1201	GWMW06	GWMW06-97		
Vinyl Chloride	ND	ND	0.0%	
chloroethane	18	17	5.7%	
1,1-Dichloroethene	ND	ND	0.0%	
trans-1,2-Dichloroethene	ND	ND	0.0%	
cis-1,2-Dichloroethene	ND	ND	0.0%	
1,1,1-Trichloroethane	ND	ND	0.0%	
Benzene	26	35	29.5%	
Trichloroethene	ND	ND	0.0%	
1,1,2-Trichloroethane	ND	ND	0.0%	
Tetrachloroethene	ND	ND	0.0%	
Arsenic	45.2	25.4	56.1%	
Lead	1.2	ND	0.0%	

ACS June 2001
 Field Duplicate Comparisons
 SDG's G1201, H1201, I1201

Parameter	Sample Result	Duplicate Result	RPD	Comments
SDG H1201	GWMW30	GWMW30-97		
Vinyl Chloride	ND	ND	0.0%	
chloroethane	ND	ND	0.0%	
1,1-Dichloroethene	ND	ND	0.0%	
trans-1,2-Dichloroethene	ND	ND	0.0%	
cis-1,2-Dichloroethene	ND	ND	0.0%	
1,1,1-Trichloroethane	ND	ND	0.0%	
Benzene	ND	ND	0.0%	
Trichloroethene	ND	ND	0.0%	
1,1,2-Trichloroethane	ND	ND	0.0%	
Tetrachloroethene	ND	ND	0.0%	
Arsenic	ND	ND	0.0%	
Lead	ND	1.2	0.0%	
SDG H1201	GWMW49	GWMW49-97		
Vinyl Chloride	ND	ND	0.0%	
chloroethane	91	95	4.3%	
1,1-Dichloroethene	ND	ND	0.0%	
trans-1,2-Dichloroethene	ND	ND	0.0%	
cis-1,2-Dichloroethene	ND	ND	0.0%	
1,1,1-Trichloroethane	ND	ND	0.0%	
Benzene	630	650	3.1%	
Trichloroethene	ND	ND	0.0%	
1,1,2-Trichloroethane	ND	ND	0.0%	
Tetrachloroethene	ND	ND	0.0%	
Arsenic	11.1	9.5	15.5%	
Lead	1	ND	0.0%	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWM1S-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-9

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-9B73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	4	J
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWM1S-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-9

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-9B73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.82	24	J
2. 593-70-4	METHANE, CHLOROFLUORO-	4.43	7	NJ
3. 60-29-7	ETHER	6.22	25	NJ
4. 109-87-5	METHANE, DIMETHOXY-	6.70	7	NJB
5. 75-09-2	METHYLENE CHLORIDE	7.39	8	NJ
6. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	10	NJB
7.	LABORATORY ARTIFACT	15.76	8	JB
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

U. S. EPA-CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW1S-17

Lab Name: COMPUCHEM

Contract:

Lab Code: LIBRTY

Case No.:

SAS No.:

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-9Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.8	B		P
7439-92-1	Lead	0.90	U		P

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____Color After: KELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWM4S-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-10A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	1000	E
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	140	
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWM4S-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-10A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 06/30/01
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.22	8	NJ
2. 108-20-3	DIISOPROPYL ETHER	8.20	6	NJ
3. 123-91-1	1,4-DIOXANE	11.25	9	NJ
4.	LABORATORY ARTIFACT	14.34	9	J
5.	LABORATORY ARTIFACT	15.76	9	JB
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWM4S-17DL

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-10DA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 10.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	100	U
75-00-3	Chloroethane	840	D
75-35-4	1,1-Dichloroethene	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
156-59-2	cis-1,2-Dichloroethene	100	U
71-55-6	1,1,1-Trichloroethane	100	U
71-43-2	Benzene	140	D
79-01-6	Trichloroethene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
127-18-4	Tetrachloroethene	100	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWM4S-17DL

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-10DA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 10.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	57	NJBD
2. 556-67-2	CYCLOTETRAZILOXANE, OCTAMETH	14.35	78	NJBD
3.	LABORATORY ARTIFACT	15.76	67	JBD
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW4S-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-10Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.5	B		P
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW06-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-12

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-12A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	18	
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	26	
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW06-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-12

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-12A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 07/01/01
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.22	11	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.70	9	NJB
3. 75-09-2	METHYLENE CHLORIDE	7.38	6	NJ
4. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	9	NJB
5.	LABORATORY ARTIFACT	15.76	11	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW06-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-12Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	45.2			P
7439-92-1	Lead	1.2	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM	Contract: OLM04-REVS	GWMW06-97
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) WATER		Lab Sample ID: H1201-15
Sample wt/vol: 5 (g/mL)	ML	Lab File ID: H1201-15RA73
Level: (low/med) LOW		Date Received: 06/23/01
% Moisture: not dec.		Date Analyzed: 07/01/01
GC Column: RTX-624	ID: 0.32 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	17	
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	35	
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW06-97

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-15

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-15RA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.23	12	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.71	6	NJB
3.	LABORATORY ARTIFACT	14.35	8	J
4.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW06-97

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-15Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	25.4			P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW11-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-1A51

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/29/01

GC Column: EQUITY624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW11-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-1A51

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/29/01

GC Column: EQUITY624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	14.39	36	JB
2.	LABORATORY ARTIFACT	15.69	41	JB
3.				
4.				
5.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW11-17

Lab Name: COMPUCHEM Contract: _____Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201Matrix (soil/water): WATER Lab Sample ID: G1201-1Level (low/med): LOW Date Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.2	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUTECH

Contract: OLM04-REVS

GWMW12-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-4A51

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/29/01

GC Column: EQUITY624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q	
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW12-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-4A51

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____
GC Column: EQUITY624 ID: 0.53 (mm)

Date Analyzed: 06/29/01

Soil Extract Volume: _____ (uL)

Dilution Factor: 1.0
Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	14.40	7	JB
2.	LABORATORY ARTIFACT	15.70	21	JB
3.				
4.				
5.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW12-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-4

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.1	B		P

Color Before: YELLOW Clarity Before: CLEAR Texture: _____Color After: YELLOW Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW13-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-20

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-20A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMMW13-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-20

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-20A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	5.58	8	NJ
2.	LABORATORY ARTIFACT	13.06	9	JB
3.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW13-17

Job Name: COMPUCHEM

Contract: _____

Lab Code: LIBERTY

Case No.: _____

SAS No.: _____

SDG No.: G1201Matrix (soil/water): WATERLab Sample ID: G1201-20Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW14-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-12

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-12A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW14-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: I1201
Matrix: (soil/water) WATER	Lab Sample ID: I1201-12	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: I1201-12A71	
Level: (low/med) LOW	Date Received: 06/23/01	
% Moisture: not dec.	Date Analyzed: 07/01/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
Number TICs found: 4	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.96	5	J
2. 75-09-2	METHYLENE CHLORIDE	6.49	6	NJ
3.	LABORATORY ARTIFACT	11.81	8	JB
4.	LABORATORY ARTIFACT	13.06	19	JB
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U.S. EPA-CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW14-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-12

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GMMW15-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-11A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	1	J
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW15-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-11A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-45-6	METHANE, CHLORODIFLUORO-	3.49	9	NJ
2.	UNKNOWN	5.57	5	J
3.	UNKNOWN	5.95	5	J
4. 75-09-2	METHYLENE CHLORIDE	6.50	8	NJ
5.	LABORATORY ARTIFACT	11.82	29	JB
6.	LABORATORY ARTIFACT	13.06	40	JB
7.				
8.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW15-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-11

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>55.3</u>			<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW17-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-5

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-5RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L - Q

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	6	J

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW17-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-5

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-5RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.81	32	JB
2.	LABORATORY ARTIFACT	13.05	38	JB
3. 527-84-4	BENZENE, 1-METHYL-2-(1-METHY	13.56	6	NJ
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW17-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-5

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.9	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW19-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-13RA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	28	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	6	J
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW19-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-13RA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.84	10	J
2. 60-29-7	ETHER	6.23	19	NJ
3. 109-87-5	METHANE, DIMETHOXY-	6.71	7	NJB
4.	LABORATORY ARTIFACT	15.77	5	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW19-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-13Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	20.7			P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW37-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-11A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW37-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-11A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	9	JB
2.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW37-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBERTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-11

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.0	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMM38-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-9

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-9A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW38-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: G1201
Matrix: (soil/water) WATER	Lab Sample ID: G1201-9	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: G1201-9A71	
Level: (low/med) LOW	Date Received: 06/21/01	
% Moisture: not dec.	Date Analyzed: 06/30/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
Number TICs found: 2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	19	JB
2.	LABORATORY ARTIFACT	14.56	39	J
3.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW38-17

1. Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-9

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	7.9	B		P
7439-92-1	Lead	3.2			P

Color Before: BROWN Clarity Before: CLEAR Texture: _____Color After: YELLOW Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW39-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-10A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L . Q

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	3	J
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	1	J
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW39-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-10

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-10A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	9	JB
2.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW39-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-10

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.92	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW40-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-3

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-3RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L . Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW40-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-3

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-3RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.81	11	JB
2.	LABORATORY ARTIFACT	13.05	24	JB
3.	LABORATORY ARTIFACT	14.55	25	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW40-17

Lab Name: COMPUCHEM Contract: _____Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201Matrix (soil/water): WATER Lab Sample ID: G1201-3Level (low/med): LOW Date Received: 06/21/01Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.6	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW41-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-1A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW41-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-1A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC..	Q
1.	UNKNOWN	5.96	6	J
2. 75-09-2	METHYLENE CHLORIDE	6.50	7	NJ
3.	LABORATORY ARTIFACT	11.82	11	JB
4.	LABORATORY ARTIFACT	13.06	43	JB
5.	LABORATORY ARTIFACT	14.56	45	J
6.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW41-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-1

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2 Arsenic 2.1 U P					
7439-92-1 Lead 5.0 P					

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW42-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-2A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW42-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-2A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.82	5	JB
2.	LABORATORY ARTIFACT	13.06	55	JB
3.	LABORATORY ARTIFACT	14.55	81	J
4.				
5.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW42-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-2

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.2	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW43-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	EPA SAMPLE NO.
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) WATER		SDG No.: I1201
Sample wt/vol: 5	(g/mL) ML	Lab Sample ID: I1201-3
Level: (low/med) LOW		Lab File ID: I1201-3A71
% Moisture: not dec.		Date Received: 06/23/01
GC Column: SPL-624	ID: 0.32 (mm)	Date Analyzed: 07/01/01
Soil Extract Volume: _____ (uL)		Dilution Factor: 1.0
		Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW43-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: I1201
Matrix: (soil/water) WATER	Lab Sample ID: I1201-3	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: I1201-3A71	
Level: (low/med) LOW	Date Received: 06/23/01	
% Moisture: not dec.	Date Analyzed: 07/01/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
Number TICs found: 2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.05	32	JB
2.	LABORATORY ARTIFACT	14.56	6	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW43-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: I1201Matrix (soil/water): WATERLab Sample ID: I1201-3Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	45.5		P	
7439-92-1	Lead	4.5		P	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW44-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-4A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW44-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-4A71

Level: (low/med) LOW

Date Received: 06/23/01

* Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.82	7	JB
2.	LABORATORY ARTIFACT	13.06	31	JB
3.				
4.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW44-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-4

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	7.6	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW45-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-5

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-5A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	17	
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	1	J
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	39	
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW45-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-5

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-5A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.49	6	NJ
2. 100-40-3	CYCLOHEXENE, 4-ETHENYL-	10.85	6	NJ
3.	LABORATORY ARTIFACT	11.81	21	JB
4. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	12.43	17	NJ
5.	LABORATORY ARTIFACT	13.06	39	JB
6.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW45-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-5

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	29.3			P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW46-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-12

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-12A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW46-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-12

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-12A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.29	6	J
2.	LABORATORY ARTIFACT	13.06	11	JB
3.	LABORATORY ARTIFACT	14.55	15	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW46-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-12

Level (low/med): LOW Date Received: 06/21/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.9	B		P
7439-92-1	Lead	0.90	U		P

Color Before: YELLOW Clarity Before: CLEAR Texture: _____Color After: YELLOW Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMM47-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-7RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L - Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

FORM I VOA-1

OLM04.2

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW47-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-7RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	12	JB
2.				
3.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW47-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBERTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-7

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW48-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-20

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-20DA71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 50.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	500	U
75-00-3	Chloroethane	80	J
75-35-4	1,1-Dichloroethene	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
156-59-2	cis-1,2-Dichloroethene	500	U
71-55-6	1,1,1-Trichloroethane	500	U
71-43-2	Benzene	2800	
79-01-6	Trichloroethene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
127-18-4	Tetrachloroethene	500	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW48-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS
Lab Code: LIBRTY Case No.:	SAS No.:
Matrix: (soil/water) WATER	Lab Sample ID: I1201-20
Sample wt/vol: 5 (g/mL) ML	Lab File ID: I1201-20DA71
Level: (low/med) LOW	Date Received: 06/23/01
% Moisture: not dec.	Date Analyzed: 07/02/01
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 50.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: Number TICs found: 3 (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.95	180	J
2.	LABORATORY ARTIFACT	11.82	1200	JB
3.	LABORATORY ARTIFACT	13.06	1500	JB
4.				
5.				
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U.S. EPA-CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW48-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: I1201Matrix (soil/water): WATERLab Sample ID: I1201-20Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.5	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW49-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-8B73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	91	
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	500	E
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW49-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-8B73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 06/30/01
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 115-07-1	PROPENE	3.69	6	NJ
2.	UNKNOWN	5.83	6	J
3. 109-87-5	METHANE, DIMETHOXY-	6.70	7	NJB
4. 75-09-2	METHYLENE CHLORIDE	7.39	18	NJ
5. 352-93-2	DIETHYL SULFIDE	10.80	8	NJ
6. 556-67-2	CYCLOTETRAZILOXANE, OCTAMETH	14.34	5	NJB
7.	LABORATORY ARTIFACT	15.76	8	JB
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW49-17DL

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-8DA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	77	D
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
71-43-2	Benzene	630	D
79-01-6	Trichloroethene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMM49-17DL

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-8DA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	31	NJBD
2.	LABORATORY ARTIFACT	15.77	34	JBD
3.				
4.				
5.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW49-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-8Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	11.1			P
7439-92-1	Lead	1.0	B		. P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW49-97

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) WATER		Lab Sample ID: H1201-14
Sample wt/vol: 5 (g/mL) ML		Lab File ID: H1201-14A73
Level: (low/med) LOW		Date Received: 06/23/01
% Moisture: not dec.		Date Analyzed: 07/01/01
GC Column: RTX-624 ID: 0.32 (mm)		Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	95	
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	480	E
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW49-97

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-14

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-14A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 07/01/01

Soil Extract Volume: _____ (uL)

Dilution Factor: 1.0

Number TICs found: 6

Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 115-07-1	PROPENE	3.69	6	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.70	7	NJB
3. 75-09-2	METHYLENE CHLORIDE	7.38	14	NJ
4. 352-93-2	DIETHYL SULFIDE	10.80	6	NJ
5. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	23	NJB
6.	LABORATORY ARTIFACT	15.76	10	JB
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW49-97DL

Lab Name: COMPUCHEM	Contract: OLM04-REVS	EPA SAMPLE NO.
Lab Code: LIBRTY	Case No.:	SDG No.: H1201
Matrix: (soil/water) WATER		Lab Sample ID: H1201-14
Sample wt/vol: 5 (g/mL) ML		Lab File ID: H1201-14DA73
Level: (low/med) LOW		Date Received: 06/23/01
% Moisture: not dec.		Date Analyzed: 07/01/01
GC Column: RTX-624 ID: 0.32 (mm)		Dilution Factor: 5.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	80	D
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
71-43-2	Benzene	650	D
79-01-6	Trichloroethene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW49-97DL

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-14

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-14DA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.71	33	NJBD
2.				
3.				
4.				
5.				
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U. S. EPA-CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW49-97

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-14Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	9.5	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWTB01-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-7RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWTB01-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-7RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.69	7	NJB
2. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	8	NJB
3.	LABORATORY ARTIFACT	15.77	12	JB
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWTB02-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-19

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-19RA71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GTWB02-17

Lab Name: COMPUCHEM Contract: OLM04-REVS

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: I1201

Matrix: (soil/water) WATER Lab Sample ID: I1201-19

Sample wt/vol: 5 (g/mL) ML Lab File ID: I1201-19RA71

Level: (low/med) LOW Date Received: 06/23/01

% Moisture: not dec. Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.49	7	NJ
2.	LABORATORY ARTIFACT	11.81	10	JB
3.	LABORATORY ARTIFACT	13.06	37	JB
4.	LABORATORY ARTIFACT	14.56	42	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB01-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-2B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWFB01-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-2B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	8	NJB
2.	LABORATORY ARTIFACT	14.35	7	J
3.	LABORATORY ARTIFACT	15.76	13	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB01-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: H1201

Matrix (soil/water): WATER Lab Sample ID: H1201-2

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB02-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-3

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-3B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWFB02-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-3

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-3B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.69	7	NJB
2. 556-67-2	CYCLOTETRAZILOXANE, OCTAMETH	14.35	9	NJB
3.	LABORATORY ARTIFACT	15.76	12	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB02-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: H1201

Matrix (soil/water): WATER Lab Sample ID: H1201-3

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	Arsenic	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	Lead	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB03-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-16A71

Level: (low/med) LOW

Date Received: 06/23/01

* Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWFB03-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: I1201
Matrix: (soil/water) WATER	Lab Sample ID: I1201-16	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: I1201-16A71	
Level: (low/med) LOW	Date Received: 06/23/01	
% Moisture: not dec.	Date Analyzed: 07/02/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
Number TICs found: 4		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	5.96	6	NJ
2. 75-09-2	METHYLENE CHLORIDE	6.49	8	NJ
3.	LABORATORY ARTIFACT	11.81	64	JB
4.	LABORATORY ARTIFACT	13.05	44	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB03-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-16

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.7	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWFB04-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-17

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-17A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWFB04-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-17

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-17A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.49	9	NJ
2.	LABORATORY ARTIFACT	11.81	62	JB
3.	LABORATORY ARTIFACT	13.06	85	JB
4.	LABORATORY ARTIFACT	14.55	45	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB04-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-17

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB05-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-18

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-18A71

Level: (low/med) LOW

Date Received: 01/06/01

% Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWFB05-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-18

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-18A71

Level: (low/med) LOW

Date Received: 01/06/01

% Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.81	28	JB
2.	LABORATORY ARTIFACT	13.06	100	JB
3.	LABORATORY ARTIFACT	14.56	68	J
4.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWFB05-17

Lab Name: COMPUCHEM Contract: _____Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201Matrix (soil/water): WATER Lab Sample ID: I1201-18Level (low/med): LOW Date Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____



APPENDIX D

LABORATORY REPORTS FROM LOWER AQUIFER MONITORING WELLS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWM4D-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-11A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWM4D-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-11

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-11A73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.69	8	NJB
2. 75-09-2	METHYLENE CHLORIDE	7.38	6	NJ
3. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	13	NJB
4.	LABORATORY ARTIFACT	15.76	11	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW4D-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-11Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW07-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-2RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

FORM I VOA-1

OLM04.2

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW07-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-2

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-2RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY- LABORATORY ARTIFACT	6.70	8	NJB
2.		15.76	9	JB
3.				
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OLM04.2

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW07-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-2

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW08-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY	Case No.:	SDG No.: I1201
Matrix: (soil/water) WATER		Lab Sample ID: I1201-6
Sample wt/vol: 5 (g/mL) ML		Lab File ID: I1201-6A71
Level: (low/med) LOW		Date Received: 06/23/01
% Moisture: not dec. _____		Date Analyzed: 07/01/01
GC Column: SPL-624 ID: 0.32 (mm)		Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW08-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-6

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-6A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.49	10	NJ
2.	LABORATORY ARTIFACT	11.82	31	JB
3.	LABORATORY ARTIFACT	13.06	44	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW08-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: I1201Matrix (soil/water): WATERLab Sample ID: I1201-6Level (low/med): LOWDate Received: 06/23/01Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.8	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW9R-17

Lab Name:	COMPUCHEM	Contract:	OLM04-REVS
Lab Code:	LIBRTY	Case No.:	SAS No.:
Matrix:	(soil/water) WATER		SDG No.: I1201
Sample wt/vol:	5	(g/mL)	ML
Level:	(low/med)	LOW	Lab Sample ID: I1201-14
% Moisture:	not dec.		Lab File ID: I1201-14DA71
GC Column:	SPL-624	ID: 0.32	(mm)
Soil Extract Volume:			Date Received: 06/23/01
			Date Analyzed: 07/02/01
			Dilution Factor: 5.0
			Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	450	
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
71-43-2	Benzene	19	J
79-01-6	Trichloroethene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMMW9R-17

Lab Name: COMPUCHEM Contract: OLM04-REVS

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: I1201

Matrix: (soil/water) WATER Lab Sample ID: I1201-14

Sample wt/vol: 5 (g/mL) ML Lab File ID: I1201-14DA71

Level: (low/med) LOW Date Received: 06/23/01

% Moisture: not dec. Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	5.96	27	NJ
2. 75-09-2	METHYLENE CHLORIDE	6.50	27	NJ
3.	LABORATORY ARTIFACT	13.06	110	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW9R-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-14

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW9R-97

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-16RA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	480	E
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	29	
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW9R-97

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-16RA73

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 07/01/01
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.23	7	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.71	8	NJB
3. 75-09-2	METHYLENE CHLORIDE	7.40	14	NJ
4.	UNKNOWN	8.22	8	J
5. 556-67-2	CYCLOTETRASTILOXANE, OCTAMETH	14.35	12	NJB
6.	LABORATORY ARTIFACT	15.77	10	JB
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW9R-97DL

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-16DA55

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/15/01

GC Column: EQUITY624 ID: 0.53 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND			
75-01-4	Vinyl Chloride	50	U	
75-00-3	Chloroethane	500	D	
75-35-4	1,1-Dichloroethene	50	U	
156-60-5	trans-1,2-Dichloroethene	50	U	
156-59-2	cis-1,2-Dichloroethene	50	U	
71-55-6	1,1,1-Trichloroethane	50	U	
71-43-2	Benzene	25	DJ	
79-01-6	Trichloroethene	50	U	
79-00-5	1,1,2-Trichloroethane	50	U	
127-18-4	Tetrachloroethene	50	U	

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW9R-97DL

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-16DA55

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/15/01

GC Column: EQUITY624 ID: 0.53 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW9R-97

Lab Name: COMPUCHEM

Contract:

Lab Code: LIBRTY

Case No.:

SAS No.:

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-16Level (low/med): LOWDate Received: 06/23/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW10C-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-16DA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	240	
75-35-4	1,1-Dichloroethene	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
71-55-6	1,1,1-Trichloroethane	50	U
71-43-2	Benzene	450	
79-01-6	Trichloroethene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW10C-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-16

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-16DA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.23	4500	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.71	30	NJB
3.	LABORATORY ARTIFACT	14.35	37	J
4.	LABORATORY ARTIFACT	15.77	49	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW10C-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-16

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW23-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-13A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GMMW23-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-13A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.57	9	J
2.	LABORATORY ARTIFACT	13.06	17	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW23-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBERTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-13

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.4	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMMW24-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-17

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-17RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW24-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-17

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-17RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.71	8	NJB
2.	LABORATORY ARTIFACT	15.77	5	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW24-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: G1201Matrix (soil/water): WATERLab Sample ID: G1201-17Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW28-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-6

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-6RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW28-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-6

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-6RA71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	15	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW28-17

Name: COMPUCHEM Contract: _____

Lab Code: LIBERTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-6

Level (low/med): LOW Date Received: 06/21/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	2.1	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW29-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-13A71

Level: (low/med) LOW

Date Received: 06/23/01

* Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	3	J
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW29-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-13

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-13A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	5.96	6	NJ
2. 75-09-2	METHYLENE CHLORIDE	6.49	7	NJ
3.	LABORATORY ARTIFACT	11.81	19	JB
4.	LABORATORY ARTIFACT	13.06	41	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW29-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-13

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM	Contract: OLM04-REVS	GWMMW30-17
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) WATER		Lab Sample ID: H1201-5
Sample wt/vol: 5 (g/mL)	ML	Lab File ID: H1201-5B73
Level: (low/med) LOW		Date Received: 06/21/01
% Moisture: not dec.		Date Analyzed: 06/30/01
GC Column: RTX-624	ID: 0.32 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q	
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMMW30-17

Lab Code: LIBRTY Case No.:

SAS No.: SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-5

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-5B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____
GC Column: RTX-624 ID: 0.32 (mm)

Date Analyzed: 06/30/01
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHER	6.21	13	NJ
2. 109-87-5	METHANE, DIMETHOXY-	6.70	9	NJB
3. 75-09-2	METHYLENE CHLORIDE	7.38	7	NJ
4. 123-91-1	1, 4-DIOXANE	11.25	5	NJ
5.	LABORATORY ARTIFACT	14.34	11	J
6.	LABORATORY ARTIFACT	15.76	12	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW30-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-5Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

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ILM04!

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW30-97

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-6

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-6B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

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OLM04.2

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMM30-97

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-6

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-6B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	10	NJB
2. 75-09-2	METHYLENE CHLORIDE	7.38	5	NJ
3. 123-91-1	1, 4-DIOXANE	11.25	5	NJ
4.	LABORATORY ARTIFACT	14.34	8	J
5.	LABORATORY ARTIFACT	15.76	11	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW30-97

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: H1201

Matrix (soil/water): WATER Lab Sample ID: H1201-6

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.2	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GMMW31-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-7A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW31-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-7

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-7A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.49	10	NJ
2.	LABORATORY ARTIFACT	11.81	50	JB
3.	LABORATORY ARTIFACT	13.05	110	JB
4.	LABORATORY ARTIFACT	14.55	57	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW31-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-7

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>0.90</u>	<u>U</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW32-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-8A71

Level: (low/med) LOW

Date Received: 06/23/01

* Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW56-97

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-15

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-15A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	13.06	23	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW56-97

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBERTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-15

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	1.7	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____Comments: _____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW56-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: G1201Matrix (soil/water): WATERLab Sample ID: G1201-14Level (low/med): LOWDate Received: 06/21/01Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.93	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW56-97

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-15

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-15A71

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethylene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW32-17

Lab Name: COMPUCHEM Contract: OLM04-REVS

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: I1201

Matrix: (soil/water) WATER Lab Sample ID: I1201-8

Sample wt/vol: 5 (g/mL) ML Lab File ID: I1201-8A71

Level: (low/med) LOW Date Received: 06/23/01

% Moisture: not dec. Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-09-2	METHYLENE CHLORIDE	6.50	6	NJ
2.	LABORATORY ARTIFACT	11.81	57	JB
3.	LABORATORY ARTIFACT	13.06	48	JB
4.	LABORATORY ARTIFACT	14.56	6	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW32-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-8

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.92	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMMW33-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-1B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GMMW33-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-1

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-1B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	7	NJB
2. 123-91-1	1,4-DIOXANE	11.24	10	NJ
3.	LABORATORY ARTIFACT	14.34	11	J
4.	LABORATORY ARTIFACT	15.76	13	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW33-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: H1201

Matrix (soil/water): WATER Lab Sample ID: H1201-1

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>16.6</u>			P
<u>7439-92-1</u>	<u>Lead</u>	<u>1.7</u>	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW34-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-15

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-15A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW34-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-15

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-15A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec. _____

Date Analyzed: 07/02/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.81	6	JB
2.	LABORATORY ARTIFACT	13.05	45	JB
3.	LABORATORY ARTIFACT	14.55	69	J
4.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW34-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-15

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW50-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-8

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-8RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

FORM I VOA-1

OLM04..2

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW50-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: G1201
Matrix: (soil/water) WATER	Lab Sample ID: G1201-8	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: G1201-8RA73	
Level: (low/med) LOW	Date Received: 06/21/01	
% Moisture: not dec.	Date Analyzed: 07/01/01	
GC Column: RTX-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
Number TICs found: 3	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.71	8	NJB
2. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.34	5	NJB
3.	LABORATORY ARTIFACT	15.77	8	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW50-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: G1201Matrix (soil/water): WATERLab Sample ID: G1201-8Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
<u>7440-38-2</u>	<u>Arsenic</u>	<u>2.1</u>	<u>U</u>		<u>P</u>
<u>7439-92-1</u>	<u>Lead</u>	<u>2.1</u>	<u>B</u>		<u>P</u>

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW51-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-4B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMMW51-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: H1201

Matrix: (soil/water) WATER

Lab Sample ID: H1201-4

Sample wt/vol: 5 (g/mL) ML

Lab File ID: H1201-4B73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 06/30/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.23	1900	J
2. 109-87-5	METHANE, DIMETHOXY-	6.70	6	NJB
3. 123-91-1	1,4-DIOXANE	11.25	6	NJ
4.	LABORATORY ARTIFACT	14.35	6	J
5.	LABORATORY ARTIFACT	15.76	13	JB
6.				
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW51-17

Lab Name: COMPUCHEM

Contract:

Lab Code: LIBRTY

Case No.:

SAS No.:

SDG No.: H1201Matrix (soil/water): WATERLab Sample ID: H1201-4Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

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ILM04.1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW52-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-18

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-18RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-01-4	Vinyl Chloride	10	U	
75-00-3	Chloroethane	10	U	
75-35-4	1,1-Dichloroethene	10	U	
156-60-5	trans-1,2-Dichloroethene	10	U	
156-59-2	cis-1,2-Dichloroethene	10	U	
71-55-6	1,1,1-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
79-01-6	Trichloroethene	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
127-18-4	Tetrachloroethene	10	U	

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

GWMW52

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.: SDG No.: G

Matrix: (soil/water) WATER

Lab Sample ID: G1201-18

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-18RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1.	UNKNOWN	6.24	2000	J
2.	UNKNOWN	7.46	5	J
3.				
4.				
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OLM04.2

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW52-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: G1201

Matrix (soil/water): WATER Lab Sample ID: G1201-18

Level (low/med): LOW Date Received: 06/21/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW53-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-19

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-19RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	6	J
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW53-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-19

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-19RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.23	9	J
2.	UNKNOWN	6.70	18	J
3. 75-09-2	METHYLENE CHLORIDE	7.39	6	NJ
4.	UNKNOWN	7.46	13	J
5. 646-06-0	1, 3-DIOXOLANE	9.12	8	NJ
6. 123-91-1	1, 4-DIOXANE	11.26	18	NJ
7. 556-67-2	CYCLOTETRASILOXANE, OCTAMETH	14.35	8	NJB
8.	LABORATORY ARTIFACT	15.77	8	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW53-17

Lab Name: COMPUCHEM

Contract: _____

Lab Code: LIBRTY

Case No.: _____

SAS No.: _____

SDG No.: G1201Matrix (soil/water): WATERLab Sample ID: G1201-19Level (low/med): LOWDate Received: 06/21/01% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.2	B		P
7439-92-1	Lead	0.90	U		P

Color Before: YELLOW Clarity Before: CLEAR Texture: _____Color After: YELLOW Clarity After: CLEAR Artifacts: _____Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM	Contract: OLM04-REVS	GWMW54R-17
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) WATER	Lab Sample ID: I1201-10	
Sample wt/vol: 5 (g/mL)	ML	Lab File ID: I1201-10RA71
Level: (low/med) LOW	Date Received: 06/23/01	
% Moisture: not dec.	Date Analyzed: 07/02/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW54R-17

Lab Name: COMPUCHEM	Contract: OLM04-REVS	
Lab Code: LIBRTY Case No.:	SAS No.:	SDG No.: I1201
Matrix: (soil/water) WATER	Lab Sample ID: I1201-10	
Sample wt/vol: 5 (g/mL) ML	Lab File ID: I1201-10RA71	
Level: (low/med) LOW	Date Received: 06/23/01	
* Moisture: not dec.	Date Analyzed: 07/02/01	
GC Column: SPL-624 ID: 0.32 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
Number TICs found: 2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.81	6	JB
2.	LABORATORY ARTIFACT	13.05	31	JB
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW54R-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-10

Level (low/med): LOW Date Received: 06/23/01

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.1	U		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM

Contract: OLM04-REVS

GWMW55-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-9

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-9A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMW55-17

Lab Name: COMPUCHEM

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: I1201

Matrix: (soil/water) WATER

Lab Sample ID: I1201-9

Sample wt/vol: 5 (g/mL) ML

Lab File ID: I1201-9A71

Level: (low/med) LOW

Date Received: 06/23/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: SPL-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	11.82	20	JB
2.	LABORATORY ARTIFACT	13.06	90	JB
3.	LABORATORY ARTIFACT	14.55	61	J
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

GWMW55-17

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: I1201

Matrix (soil/water): WATER Lab Sample ID: I1201-9

Level (low/med): LOW Date Received: 06/23/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.6	B		P
7439-92-1	Lead	0.90	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUTECH

Contract: OLM04-REVS

GWMW56-17

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-14

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-14RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec. _____

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GWMM56-17

Lab Name: COMPUTECH

Contract: OLM04-REVS

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: G1201

Matrix: (soil/water) WATER

Lab Sample ID: G1201-14

Sample wt/vol: 5 (g/mL) ML

Lab File ID: G1201-14RA73

Level: (low/med) LOW

Date Received: 06/21/01

% Moisture: not dec.

Date Analyzed: 07/01/01

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-87-5	METHANE, DIMETHOXY-	6.70	9	NJB
2.	LABORATORY ARTIFACT	15.76	10	JB
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